

University of Alberta

Evaluating Community Conservation in Kenya

By

Michael J. Salomons



A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Science

in

Conservation Biology

Department of Renewable Resources

Edmonton, Alberta

Fall, 2000



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-59872-1

University of Alberta

Library Release Form

Name of Author: Michael J. Salomons

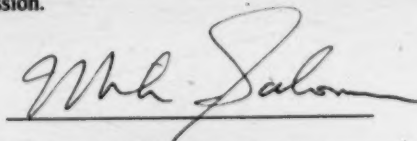
Title of Thesis: *Evaluating Community Conservation in Kenya*

Degree: Masters of Science

Year this Degree Granted: 2000

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.



P.O. Box 1712, Rocky Mountain House,
Alberta, Canada, T0M 1T0

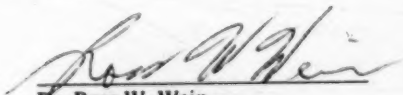
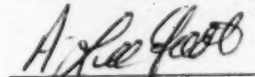
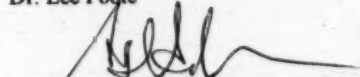
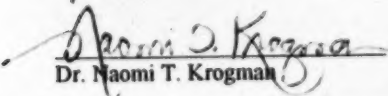
Date:

Aug 29, 2000

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Evaluating Community Conservation in Kenya* submitted by Michael J. Salomons in partial fulfillment of the requirements for the degree of Master of Science in Conservation Biology.


Dr. Ross W. Wein
Dr. Lee Foote
Dr. Robert J. Hudson
Dr. Naomi T. Krogman

Aug 28, 2000

ABSTRACT

This study focuses on three Community Conservation projects in Kenya: the Mwaluganje Community Elephant Sanctuary, the Il Ngwesi Tourist Bandas, and the Kimana Community Wildlife Sanctuary. The first unit of study explores a number of untested assumptions behind Community Conservation and includes recommendations to continue international support for conservation efforts and to use a variety of approaches to conservation. The second unit of study identifies criteria that influence conservation success and provides a conceptual model to help determine effective conservation approaches depending on local development and conservation priorities. The third unit of study explores the relationship between conservation, poverty, and empowerment, and shows that these three projects have generally contributed little towards poverty alleviation as measured by eight aspects of social empowerment. This thesis concludes that more effort must be put into quantitative data collection, empowering local people, and on taking a global as well as site-specific approach to conservation.

ACKNOWLEDGEMENTS

Professionally, I would like to acknowledge the following for the important roles they have played as contributors to the thesis research:

The Maasai people of the Kuku, Kimana, and Il Ngwesi Group Ranches, and in particular Moses Ole Kaka and Mwalonya Lonya, my invaluable field assistants.

The Kenya Wildlife Service for a wide range of support ranging from logistical support to project documentation

The African Environmental Education Foundation staff who supported the logistics and contributed ideas that strengthened the work.

Doctor Gordon and Caroline Brown who provided friendship, support, and advice during my stay in Kenya.

A number of leading conservationists and community development practitioners in East Africa provided valuable feedback and suggestions.

My Supervisory and Examining Committee members, Ross Wein, Lee Foote, Bob Hudson and Naomi Krogman.

Special thanks to Alastair Franke for discussions that led to refinement of the model in Chapter 3.

Financial support from CIDA, and a University of Alberta Graduate Research Assistantship.

And finally my wife, Maguy, for assisting me in my field work, for her invaluable support, for encouraging me and for being a faithful and loving friend.

TABLE OF CONTENTS

ABSTRACT

ACKNOWLEDGEMENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS USED

CHAPTER I: GENERAL INTRODUCTION.....	1
Introduction.....	1
Objectives.....	2
Research Area.....	2
Research Methods.....	2
Literature Cited.....	5
CHAPTER II: MYTHS & ASSUMPTIONS BEHIND COMMUNITY CONSERVATION.....	7
Introduction.....	7
Untested Assumptions.....	8
i. Poverty is the cause of our environmental problems and therefore the elimination of poverty will solve our environmental problems.....	8
ii. The most important value of bio-diversity is its economic value to humans.....	9
iii. Community Conservation is in the best interests of the local people.....	10
iv. Environmental problems are primarily local problems of adjustment, not national problems of policy.....	11
v. Indigenous peoples are natural conservationists, and therefore giving local communities tenure over natural resources will ensure that conservation is effective.....	11
Conclusion and Recommendations.....	12
i. Continued need for international support for conservation efforts.....	12
ii. Focus on the global scale and the North.....	12
iii. Don't let the pendulum swing too far.....	12
iv. More research into the myths and assumptions behind all conservation models.....	13

Literature Cited.....	13
CHAPTER III: FORTRESS VS. COMMUNITY CONSERVATION IN EAST AFRICA: A	
CONCEPTUAL VIEW OF FACTORS LEADING TO SUCCESS.....	17
Introduction.....	17
The Criteria.....	18
i. Political	18
ii. Community	19
iii. Institutional	19
iv. Economic	20
v. Ecological	20
Modeling the Approach.....	21
Case Studies.....	21
i. The Mwaluganje-Golini Community Elephant Sanctuary.....	22
ii. The Il Ngwesi Tourist Lodge.....	22
Discussion and Conclusions.....	23
Literature Cited.....	23
CHAPTER IV: POVERTY, EMPOWERMENT AND COMMUNITY CONSERVATION IN EAST	
AFRICA.....	29
Introduction.....	29
The Study.....	29
Results.....	30
The Mwaluganje-Golinji Community Elephant Sanctuary.....	30
The Kimana Community Wildlife Sanctuary.....	30
The Il Ngwesi Tourist Bandas.....	31
Discussion and Conclusions.....	32
Literature Cited.....	34
CHAPTER V: GENERAL DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.....	
Discussion.....	37

Conclusions.....	37
Recommendations.....	38
Literature Cited.....	39

LIST OF TABLES

Table 4.1 - Friedmann's (1992) Empowerment Model to alleviate poverty.....	35
Table 4.2 - Application of Friedman's (1992) model of poverty and empowerment to three Community Conservation projects in Kenya.....	36

LIST OF FIGURES

Figure 1.1 - Map of Kenya showing the three Community Conservation projects	6
Figure 3.1 - A conceptual view of intentional and inadvertent benefits (under dotted line) flowing to conservation under a gradient of fortress to community conservation systems.....	27
Figure 3.2 - Benefits flowing to conservation under the present management (Fortress Conservation) strategies at the Mwaluganje Community Elephant Sanctuary, Kenya.....	27
Figure 3.3 - Benefits flowing to conservation under the present management (Community Conservation) strategies at the Il Ngwesi Group Ranch, Kenya....	28

LIST OF ABBREVIATIONS

CC – Community Conservation

DRSRS – Department of Rural Surveys and Remote Sensing

FC – Fortress Conservation

IUCN – International Union for the Conservation of Nature and Natural Resources

KWS – Kenya Wildlife Service

USAID – United States Agency for International Development

CHAPTER 1: GENERAL INTRODUCTION

INTRODUCTION

Until the present century, Africa was the only continent not impacted by human-induced crashes in biodiversity that have plagued other continents and regions of the world. This was due in part to the co-evolution of humans and animals, low human population numbers controlled by disease, famine, and warfare, and to taboos on animal use by human groups. The arrival of industrialized Europeans in the late nineteenth century greatly changed these relationships. The colonial government recognized that the greatest threat to Africa's wildlife came not from indigenous African cultures but from the new white immigrants, and from the outset of the colonial era instituted strict laws for the protection of wildlife. Game reserves were set up intended to protect 'primitive' Africa, including the wildlife and pastoral tribes (Western 1997). In 1906, these reserves came under the management of the newly established East African Game Department. The goal of the Game Department was primarily preservationist, seeking to enforce hunting laws and to protect the 'interesting animal life' of the region (Western 1997). In spite of these efforts, wildlife numbers fell significantly and in the 1920's, strict game laws that made subsistence hunting illegal were established (Blankenship 1990).

Pushed out of their homelands by white settlers, it was in the marginal lands considered unsuitable for industrial agriculture that both indigenous cultures and wildlife took refuge. In contrast to falling populations of wildlife, Kenya's human population began to sharply increase, and a system of National Parks to further protect wildlife was established in the late 1940's (Lusigi 1981). National Parks were important for the protection of wildlife but had two negative impacts on Kenya's indigenous cultures. First, National Parks took even more land away from indigenous groups, accelerating the settlement of marginal lands particularly prone to mismanagement and overuse (Thomas-Slayer 1992). Secondly, National Parks deprived indigenous groups from the resources on these lands, which most of these cultures had depended on for centuries.

Kenya's independence from Britain saw few changes in the laws governing the utilization of wildlife. Instead, increasing population pressure and decreasing natural spaces led to more national parks being created and the further displacement of indigenous peoples. Despite these attempts, wildlife numbers continued to fall. Due largely to commercial poaching, in just one fifteen year period (1975-1990) Kenya's elephant population dropped by 85%, and its rhino population by 97% (USAID 1991).

This dramatic increase in poaching activity was due in part to the corruption, low morale, and low salaries in the Kenya Government (USAID 1991). It was also due to the growing hostility of the people living around protected areas. For example, the Maasai people living around Amboseli National Park, frustrated at being denied access to the water resources within the park, adopted a policy of killing any wildlife which moved out of the park. This resulted in the killing of ninety percent of the park's rhino population, and by 1988, the extirpation of lions from the park (Lovatt-Smith 1986).

It became clear that major improvements to government-controlled park and reserve management would be needed. In 1989, the Government of Kenya enacted the Wildlife Conservation and Management Act, and in 1990 set up the Kenya Wildlife Service (KWS) (USAID 1991). The first priority of the KWS was to control poaching in the country. The establishment of an internationally endowed anti-poaching unit of trained rangers, and the instatement of a controversial "shoot to kill" policy was to a large part successful in controlling commercial poaching. These measures did not, however, lessen any of the conflict between indigenous groups and wildlife as they competed for scarce resources. Aside from being denied access to resources within the national parks, growing populations meant that people were forced to live more intimately with wildlife. Consequently, rural people have been overwhelmingly hostile to, and have little sympathy for, the parks system (Lusigi 1981). Instead, these communities see nature conservationists as the cause of forced community removal and instruments of oppression (Koch 1994).

Earlier attempts in the Amboseli area involving local communities in wildlife conservation had laid the groundwork for attempting a new approach to conservation in Kenya: one where not just the costs of conservation but the benefits as well accrued to local populations. In 1992 the KWS received a five-year

USAID grant to institutionalize a community-based approach to conservation. This project, the Conservation of Bio-diverse Resource Areas (COBRA), aimed "to increase socio-economic benefits to communities living adjacent to Kenya's Parks/Reserves from conservation and sustainable management of wildlife and natural resources" (USAID 1991). The ultimate goal of COBRA was to develop a more active role for local communities within the wildlife conservation sector, which it attempted to do by promoting and funding community enterprise projects, social development projects, and wildlife management training programs.

In spite of the wide-spread acceptance of the Community Conservation narrative both in Kenya and internationally, little evidence has come forward as to the effectiveness or ineffectiveness of CC projects at meeting either conservation or development goals. This is in part because CC has become so self-evidently the 'right' approach that few projects (especially in sub-Saharan Africa) have been studied critically (Hulme and Murphree 1999). There is a large (and growing) descriptive literature, but most studies are more or less optimistic descriptions of local level 'success', often early in a project's life. Most reports are successive evaluations of a region or program, using repeated examinations of the same projects and other CC reports, without questioning the rapid, and real, changes (Hulme and Murphree 1999).

Those reports that have been more thorough are becoming increasingly critical of the reality of CC on the ground. A review concluded that "few Integrated Conservation and Development Projects can realistically claim that biodiversity conservation has been or is likely to be significantly enhanced as a result of current or planned activities" (World Bank, Indonesia and Pacific Islands Country Department, 1997, quoted in Inamdar, Jode et al. 1999). In Africa, Hackel (1999) concluded that while "CBC is an important policy option in the effort to save African Wildlife, I propose that it is being oversold and the need for protectionism is being underestimated".

OBJECTIVES

While over seven million USD has been invested in the continuing COBRA project, there have been few external evaluations on the accomplishments of the COBRA project. The general objective of the present study was to evaluate three community-based wildlife projects instituted by the KWS under COBRA in order make recommendations for future projects. The study is divided into three objectives:

- 1) The first unit of study was to examine the assumptions that lie behind the Community Conservation narrative
- 2) The second unit of study was to identify the criteria that are essential to the success of Community Conservation initiatives, and to determine how these criteria can be used to improve the functioning of present and future projects
- 3) The third unit of study was to determine what effect Community Conservation initiatives have had on development, and specifically on the empowerment of local communities

RESEARCH AREA

The COBRA project was originally centred on three districts in Kenya: Coast district, Laikipia district, and Kajiado district. For the present study, one Community Conservation project was selected from each district: the Mwaluganje-Golinji Community Elephant Sanctuary in Coast District, the Il Ngwesi Tourist Bandas in Laikipia District, and the Kimana Community Elephant Sanctuary in Kajiado District (Figure 1.1).

RESEARCH METHODS

This study was based on a residency in Kenya from January to July of 1999. The original model for this research was to focus on one COBRA project target area (the Amboseli area of Kajiado district) and to evaluate the project's ecological, economic, and social effects (similar to the approaches of Brandon 1992; IIED 1994; Fetterman 1997; Muir-Leresche 1998). Within these parameters, two different approaches to evaluation were to be used. The first approach was a 'goal-based' evaluation using the specific objectives and indicators of success of the COBRA project (as stated in the COBRA project proposal (USAID 1991)). A survey was developed for the project area target population that was to be compared with pre-project

data collected by the COBRA project. Interviews were planned with key KWS and funding agency personnel. Complementary data was to be gathered from as wide a variety of sources as possible. Park attendance records, census data, KWS reports, USAID reports, etc. were all to be used to assess whether or not the specific objectives of the COBRA project had been realized.

Early in the study, it became apparent that such an approach was not feasible. Ecologically, a large number of researchers were collecting their specific data in the Amboseli area and no central agency collected integrated data. This meant access to many databases was cumbersome. Economically, the COBRA working fund had been frozen earlier in the year due to accusations of fraud; thus, I was advised to avoid all economic questions. A comprehensive socio-economic survey in the Amboseli ecosystem (which included such areas as community attitudes towards wildlife and protected areas, education, occupation, and income) was completed in 1995 but the original database could not be located. A follow-up survey that was completed in 1998 was of questionable validity.

The second approach to evaluation, recognizing that the stated goals of a particular program most often reflect the funding agency's definition of the problem, was to have been a 'goal-free' evaluation based on the target community's feelings on the merit and worth of the project (Patton 1997, Wallace et al 1995). Despite significant effort on my part, it was clear that the timing was wrong for this approach as well. My research project had been developed six months before my arrival when Dr. David Western (a strong advocate of CC) was director of the KWS. Several months before my arrival in Kenya, Dr. Richard Leakey who adopted a more parks based approach to conservation replaced Dr. Western. The fund which could have helped to support a participatory evaluation (the COBRA working fund) was frozen, and the staff I was to have worked under were understandably hesitant to get involved in new projects due to rumors of imminent layoffs in their department (the Community Wildlife Service, or Partnership division).

Due to these factors, it was decided (in conjunction with KWS, the partner organization in this research) to change the focus of my research and to undertake an independent review and evaluation of three different projects in the three COBRA focal districts. This shift in project focus necessitated a complete shift in study methodology. A quantitative survey approach in the target areas was rejected due to a number of factors. One factor was that the resulting time frame, budget, and logistics were insufficient to do an in-depth survey in each of the three areas. A second factor was concerns about ethics and possible community burnout from being over-surveyed. For example, in the Kimana Group Ranch area a half-dozen surveys, on the same subject, had been conducted in the last five years alone. A third factor was increasing doubts as to the validity of surveys in rural areas (Campbell 1984; Mitchell 1991). The time frame available to me in each area augmented this concern. As Herren (1991) cautioned in his Doctoral dissertation on the Mukogodo Maasai in Kenya, "The difficulties of directly asking pastoralists for the size of their holdings are notorious, especially when the researcher and his intentions are not well known at the beginning of the study. Further, there are often cultural aversions against counting both people and livestock." A fourth factor was my direct affiliation with the Kenya Wildlife Service. Most communities have an overall negative view of the KWS as the KWS is responsible for the policing of wildlife and reserves, and in the past was the government department responsible for appropriation of land for National Parks. This affiliation, while helpful in terms of logistical support and gaining the necessary government clearance, undoubtedly influenced local communities responses to my questions. This effect would have been more pronounced and would have raised more suspicions if questions had been posed about poaching and attitudes towards wildlife and parks.

Information on each project came from three main sources: from over ninety informal interviews, personal observations collected as field notes, and background reports. Interviews with community members were conducted in an informal, conversational style. Questions were asked about the key problems and benefits of living in the area and of the projects themselves; main trends in terms of wildlife problems and numbers, and economic and job prospects in the area over the last five years; as well as issues identified in previous interviews and in background reports. Interviews typically lasted between ten and thirty minutes, largely dependent on the interviewees obvious comfort or discomfort with the interview process and their willingness to disclose information. Interviews with project personnel were typically longer (from 30 to 60 minutes) and covered more project specifics such as financing and project development. Literature reviewed in Kenya that helped in the development of the interview guide was taken from primary and

secondary sources and background reports, mostly from libraries and personal collections in Nairobi. Most of these documents are unpublished and therefore photocopies were made and brought back to Canada. Some information was unavailable for photocopying but relevant notes were collected in field notebooks. In Canada, a review of library and Internet sources was undertaken.

The first major group of people interviewed were local residents whose livelihood was based primarily on the local resource base. In each area I worked with a 'gatekeeper', someone known in the local community who could act as a source of information, a cultural informant, and an interpreter. In the Kimana area, this was a member of a local Maasai group ranch who worked for the Kuku Field Studies Centre (an educational camp for tourists and student groups); in the Mwaluganje area this was a son of a local elder; and in the Il Ngwesi area this was an employee of the Lewa Downs Wildlife Conservancy. In an attempt to avoid some of the more common interview biases in rural areas (see Chambers 1992) I traveled by foot and by bicycle to areas both remote and close to major centres, and focused on people living within one kilometer of the sanctuary, both men and women, and of various socio-economic and ethnic groups. In each area except Il Ngwesi I spoke with at least thirty people comprised of all major ethnic groups in the area, both men and women, and as wide an age range of adults as possible. Due to the inaccessibility of the Il Ngwesi, I was only able to speak with ten male elders, and therefore had to rely more on information collected just before my visit by the African Wildlife Foundation. For each interview, I identified myself as working with the KWS to gather information on the Community Conservation projects in the area. Notes were taken during each interview and recorded in a field notebook along with relevant observations.

While the information gathered in these interviews was an important part of project analysis, I felt that their validity was weakened by a number of factors. The short time period spent in each area (between two and six weeks) was not enough to build up any level of trust among local community members who often distrust (particularly European) outsiders. I also felt that the quality of the information gathered in each area was heavily influenced by the 'gatekeeper' I worked with, particularly his acceptance in the community, and the quality and accuracy of the translations and information he was able to provide. While in all three cases I explained to my host group (the Kuku Field Studies Centre in Kimana area, the KWS in Mwaluganje area, and Lewa Downs in the Il Ngwesi area) that I was looking for someone who was fluent in local languages, was a long-term resident, was well-accepted in the community, and had at least completed high school, in real terms I had little choice as to the particular 'gatekeeper' I worked with. Furthermore, I felt that the quality of the information gathered in each area was influenced by the different ethnic groups in each area, their culture, their relationship to outsiders, and their relative openness to sharing information. Given that there were three separate cases, this quality varied between projects.

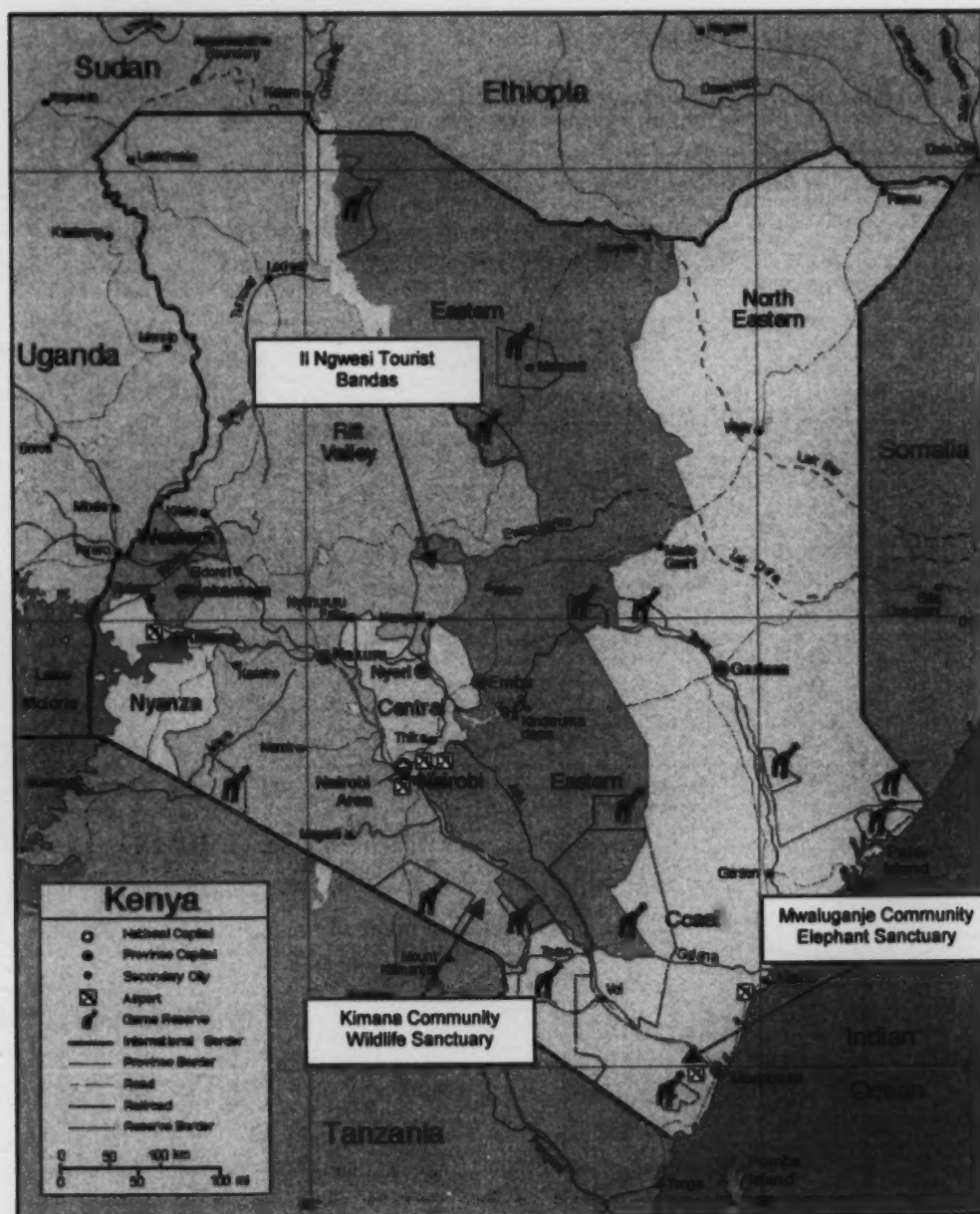
In an attempt to eliminate these biases and to provide a more complete picture of these projects, I also interviewed local residents who did not base their living on the local resource base, as well as non-local individuals working and living in Kenya (both ex-patriots and Kenyan nationals). Members of the first group included local government officials, teachers, hotel employees, conservation officers, and employees of national and international non-governmental organizations. Most of the members of this group had high levels of formal education and were not originally from the project area. Members of the second group were mostly people working directly working in the field of conservation, although several worked in other fields such as agriculture or community development. Interviews with both groups were conducted directly by me in English. At the beginning of each of these interviews, I identified myself, my objectives, and that I was working with KWS. Interviews did not follow a set format but were more conversational, with an attempt to develop a rapport with the interviewee. Questions were based on the area of expertise of the interviewee (for example, agriculture related questions with the District Agricultural Officer). Information gathered from these interviews was particularly useful in corroborating information gathered in background reports and in other interviews.

Interview and field notes (interviews were not transcribed) were typed up and then analyzed (with the help of the software package QSR NUD*IST) for major themes and sub-themes. A triangulation approach was used to verify all information gathered: any identified discrepancies became the subject of further study.

LITERATURE CITED

- Blankenship, L. H., Ian Parker, Svend A. Qvortup (1990). Game Cropping in East Africa: The Kekoey Experiment. Texas Agricultural Experiment Station, Texas A&M University System.
- Brandon, K. and Michael Wells (1992). People and Parks: Linking Protected Area Management with Local Communities. Washington, D.C., The World Bank.
- Campbell, J.G. and Linda Stone (1984). "The Use and Misuse of Surveys in International Development: An Experiment From Nepal." Human Organization 43(1): 27-37.
- Chambers, R. (1992). Rural Appraisal: Rapid, Relaxed and Participatory. Brighton, Institute of Development Studies.
- Fetterman, D. M. (1997). Empowerment Evaluation and Accreditation in Higher Education. Evaluation for the 21st Century: A Handbook. E. C. a. W. R. Shadish. Thousand Oaks, Sage Publications, Inc.: 381-395.
- Herren, U. J. (1991). Socioeconomic Strategies of Pastoral Maasai Households in Mukogodo, Kenya. Bern, University of Bern.
- Hulme, D. and M. Murphree (1999). "Communities, Wildlife, and the 'New Conservation' in Africa." Journal of International Development 11: 277-285.
- IIED (1994). Whose Eden? An Overview of Community Approaches to Wildlife Management. London, England, International Institute for Environment and Development.
- Inamdar, A., Helen de Jode, Keith Lindsay and Stephen Cobb (1999). "Capitalizing on Nature: Protected Area Management." Science 283(March 19): 1856-1857.
- Koch, E. (1994). Reality or Rhetoric? Ecotourism and Rural Reconstruction in South Africa. Geneva, United Nations Research Institute for Social Development.
- Lovatt-Smith, D. (1986). Amboseli Nothing Short of a Miracle. Nairobi, Kenway Publications.
- Lusigi, W. J. (1981). "Wildlife Conservation in Kenya." Ambio 10(2): 87-92.
- Mitchell, J. and Slim Hugo (1991). "Listening to Rural People in Africa: The Semi-structured Interview in Rapid Rural Appraisal." Disasters 15(1): 68-72.
- Muir-Leresche, K. (May, 1998). Wildlife as a Sustainable Land-Use Option in Africa. Lecture Notes: University of Alberta.
- Patton, M. Q. (1987). How to Use Qualitative Methods in Evaluation. London, England, Sage Publications.
- Thomas-Slayter, B. P. (1992). "Implementing Effective Local Management of Natural Resources: New Roles for NGOs in Africa." Human Organization 51(2): 136-142.
- USAID (1991). Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247). Nairobi, USAID.
- Wallace, M. G. C., Hanna J.; and Sabrina Burke (1995). "Review of Policy Evaluation in Natural Resources." Society and Natural Resources 8(1): 35-47.
- Western, D. (1997). The origins and development of conservation in East Africa. Kenya Wildlife Service. Nairobi, Kenya Wildlife Service.

Figure 1.1. Map of Kenya showing the three Community Conservation projects. Used with permission of Magellan Geographix™ ©1992.



©1992 Magellan Geographix™ Santa Barbara CA (800) 929-4627

CHAPTER II: MYTHS & ASSUMPTIONS BEHIND COMMUNITY CONSERVATION IN KENYA

INTRODUCTION

Wild species worldwide are being driven to extinction 50-100 times faster than we would expect naturally (Norton-Griffiths and Southey 1995). These losses are most pronounced in the tropics. For example Kenya, in the two decades preceding the 1990's, lost 44% of the total wildlife (Norton-Griffiths 1996/7), 85% of the elephant, and 97% of the rhino population (USAID 1991). Failures to stem these declines have been largely blamed on the 'Fortress Conservation' model of the past (fences, armed rangers, removal of communities), which alienated people and isolated wildlife (Adams and Hulme, forthcoming; quoted in (Hulme and Murphree 1999)). The emphasis has now shifted to a more community-based approach - an approach that attempts to combine elements of community development and wildlife conservation. This approach was heavily influenced by documents such as the *World Conservation Strategy* (World Conservation Union 1980) which drew attention to the inseparable link between conservation and development. The mainstream acceptance of this approach was acknowledged by the World Commission on Environment and Development (in 1987), by the Rio Earth Summit (in 1993), and in subsequent publications from international conservation groups (*Global Biodiversity Strategy*, *Caring for the Earth*, and many others).

Kenya, as part of their conservation efforts, adopted a more community-based approach to conservation. One international organization contributed over seven million dollars to the Kenya Wildlife Service to set up pilot projects. Other international conservation organizations have replicated these efforts in most areas of the country. Most of these projects focus on getting the benefits of wildlife based tourism into the hands of rural, indigenous people who have been denied access to land and resources historically while suffering the negative impacts of living in close association with wildlife.

Community Conservation (CC) promotes the participation of people living near protected areas in land-use policy and management by giving people ownership over wildlife resources, or by at least allowing local people to benefit from wildlife conservation (Hackel 1999). The CC model of conservation does offer some distinct advantages over previous models that separated wildlife and people. First, it offers an alternative to the prevailing paradigm of separating conservation and production systems. Second, CC philosophy promotes local communities absorbing a share of both the costs and benefits of wildlife management. Thus, for many countries unable to afford even the price of basic education and health-care, CC is an alternative to costly conventional management of protected areas. Third, CC has the potential to empower local people, and to re-value systems of traditional ecological knowledge that may play an essential role in the conservation of wildlife species. Fourth, by allowing people to benefit from conservation, CC may reduce some of the conflict that currently exists between wildlife and local communities. Fifth, CC fits in well with the political agenda of many international conservation and development organizations.

Despite the number of projects initiated and the considerable institutional support received, growing evidence indicates that Community Conservation is not the magic bullet that conservationists hoped. In a review of 36 integrated conservation and development projects, only five demonstrated that they had positively contributed to the conservation of wildlife (Kremen, *et al.* 1994). Leach (1999) noted that the practical implementation of CC initiatives fell short of expectations, while Inamdar *et al.* (1999a,b) reports that CC initiatives have generated few measurable benefits in terms of either conservation or rural development. Hackel (1999) concludes that, "although CC is an important policy option in the effort to save African wildlife, I propose it is being oversold and the need for protectionism underestimated". Disagreements between successive leaders of the Kenya Wildlife Service (Western *et al.* 1994; Leakey 1998) suggest that CC projects have not met expectations in Kenya either.

The failures of CC projects have been variously attributed to a multitude of causes. These include the erosion of customary institutions (Turner 1999), that CC projects are based more on political ideology than ecological reality (Brosius, *et al.* 1998; Spinage 1998) and that community participation is an incidental rather than an integral part of projects (IIED 1994; Koch 1994; Cummings 1997). I believe that Community Conservation programs have not lived up to expectations because they are based on a number

of untested assumptions. Below, I examine five of these that underlie Community Conservation programs in Kenya.

UNTESTED ASSUMPTIONS

Assumption 1: Poverty is the cause of environmental problems and therefore the elimination of poverty will solve environmental problems.

This assumption is interwoven with two other assumptions. One, that freedom from poverty allows people to think beyond today to the longer-term; and two, that community development based on economic growth is the best way to free people from poverty.

The assumed link between poverty reduction and environmental conservation was first emphasized in the groundbreaking *World Conservation Strategy* (World Conservation Union 1980). The central message of this report is that conservation cannot be achieved without development to alleviate poverty. The type of development needed, according to the *World Conservation Strategy*, is sustainable economic development based on the conservation of natural resources. *Our Common Future*, published by the World Commission on Environment and Development in 1987 (Brundtland Report), emphasized that conservation and development should be mutually inclusive. The Brundtland Report called for a five- to ten-fold increase in global economic activity in order to achieve global sustainability (MacNeill, 1989, quoted in (Goodland 1991). Even the World Bank's report *Development and the Environment* (1992) speaks of "...the strong and growing evidence of the links between poverty reduction and environmental goals... Economic development and sound environmental management are complementary aspects of the same agenda.... Alleviating poverty is both morally imperative and essential for environmental sustainability. Economic growth is essential for sustained poverty reduction." I agree that alleviating poverty should be one of the most important goals of international development efforts. However, I see some fundamental problems with the assumed linkage between poverty reduction and environmental conservation.

Experiences in other countries seem to indicate that a concern with the sustainability of the environment is a luxury attached to a high level of development rather than an integral part of the development process. I agree that poverty that forces people to live on ecologically fragile lands and where they deplete resources in order to survive contributes to Kenya's environmental problems. However, it does not necessarily follow that simply eliminating poverty will solve Kenya's environmental problems. Eliminating the extremes of poverty in Kenya may reduce pressure on the resource base, but it will not necessarily eliminate unsustainable patterns of consumption, nor necessarily instill a conservation ethic in people. The UNDP reports that from 1970 to 1995, Kenya's human development value rose from 0.254 to 0.463 (UNDP 1998). Conversely, this increase in human development occurred during the same period that Kenya lost 44% of its wildlife (Norton-Griffiths 1996/7).

On a global level, the countries generally regarded as the most developed countries (for example according to the UNDP's Human Development Index) also have the highest per/capita consumption levels in the world. It is these same global consumption patterns, according to the UNDP, that encourages countries like Kenya to export raw commodities, the production of which results in environmental damage and loss of biodiversity (UNDP 1998). Another problem I have with the assumed linkage between conservation and development is that not all forms of development are environmentally friendly. The traditional and predominate measure of development was and continues to be simply progress - usually measured in terms of aggregate levels of production and consumption (Brohman 1997). It is this vision of development, with its rapid economic growth and rapid urbanization that has put many developing countries on a steep curve of rising resource-use and pollution (UNDP 1998). It is clear that if conservation and development are to be linked, there is a need for new visions and sustainable development models. The problem with sustainable development is that it defies simple definition (Hulme and Murphree 1999). The concept itself is so open to interpretation that almost all development organizations today, regardless of their goals and environmental ethics, claim to be practicing sustainable development. However, only a small subset of development opportunities exist that are potentially environmentally, economically, and socially sustainable (Inamdar, *et al.* 1999a,b). Because of this reality, it is difficult to see a difference between many of the development programs in Kenya today and those of the past.

In 1893 a colonial administrator wrote of the development needs of the Kenyan population (Lugard 1893):

The sinking of wells, the system of irrigation, the introduction and planting of useful trees, the use of manure, and of domestic animals for agricultural purposes, the improvement of his implements by the introduction of the primitive Indian plough, etc.—all of these, while improving the status of the native, will render his land more productive, and hence, by increasing his surplus products, will enable him to purchase from the trader the cloth which shall add to his decency; and the implements and household utensils which shall produce greater results for his labor and greater comforts in his social life.

Twenty years later, the realities of development in the neighboring Congo Free State were also clear:

Thirty years ago what is now the Congo Free State was a wild tangle of luxuriant tropical growth through which hordes of black savages roamed, fought, and practiced their unspeakable barbarities, living almost entirely upon the spontaneous products of Nature. The white magician has waved his wand and the scene is transformed... Where the shy antelope or spring-bok browsed, remote from human intrusion, the soil is now turned up by the plough, and devoted to the growing of coffee, cocoa, tea and various condiments, cinnamon, pepper, ginger, nutmegs, clove, vanilla, etc. (Wack 1905).

Not much has changed in the past century. In the 1990's, the following was written of the development needs of the Kenyan population:

Development, in smallholder agriculture, and the microenterprises which support it, has the greatest potential in terms of the impact on job creation, poverty reduction, increased economic opportunity for women and biodiversity conservation. Environmental concerns are factored into all activities. Consequently, the Mission's strategic approach is to transform subsistence agriculture to market-oriented production and commercialization, while simultaneously stimulating small and microenterprise development. This will help increase income for farmers, while creating jobs off the farm (USAID 1998).

The key development challenge facing the Government over the next three years will be to create the conditions for rapid and sustained growth at a level that will result in a significant reduction in unemployment and poverty. The main aim of agricultural sector policy will be to accelerate agricultural growth, increase smallholder productivity, and expand rural employment. With the substantial deregulation of the domestic markets for all agricultural commodities, this objective will be pursued under a liberalized system where the private sector plays the key role in production, marketing and processing (Government of Kenya, in collaboration with the World Bank and the IMF 1996).

I am not promoting anti-development. However, to tie conservation to development will not change anything unless it is linked to a new form of development — one that is not just beneficial for humans but for the environment as well. Even sustainable development will inevitably decrease biodiversity to some extent (Robinson 1993). While the wisest strategy for maintaining biodiversity is still to integrate conservation and development, society must ensure that adequate regions of unmodified habitat are protected (Kremen *et al.* 1994) for future land use flexibility.

Assumption 2: The market is an effective determinant of conservation priorities

One of the dominant threads in the philosophy behind Community Conservation is the belief that patterns of resource use, including conservation, are best determined by neoliberal market forces (Hulme and Murphree 1999). This has been part of a rising trend of economic valuation of land, resources, and peoples in Kenya from the beginning of the colonial process. Indeed, increasing levels of external debt (Kenya's external debt has almost doubled in the last two decades) has forced a need for more foreign exchange, which in turn has further increased the commodification of resources. The Darwinian survival of the fittest

has become the Draconian survival of the most economically productive. The Kenya Wildlife Service (KWS) Policy Framework (1990) states that "wildlife-based economic activity should provide an economic justification for conservation". The KWS' Community Wildlife Programme operated under the principle that 'wildlife should pay for itself' (AWF 1997). The KWS Conservation of Bio-Diverse Resource Areas (COBRA) project – the basis for its community conservation initiatives – aims to demonstrate that it is in people's financial and social interest to protect wildlife (USAID 1991). Community Conservation initiatives in Kenya rely heavily on tourism and tourism in turn relies heavily on charismatic mega-fauna. For example, it has been estimated that each lion in Kenya earns 500,000 USD per year (Koch 1994). Tourism may provide incentives for conservation of these financially important animals, but this is not the same as maintenance of biodiversity and ecosystem sustainability (Ashley and Roe 1998). As Richard Leakey puts it, "It is quite clear that there are countless species that can never pay, and yet if we are to have a healthy planet those species must stay" (Leakey 1998).

What is good for people's economic and social interests is not necessarily good for the environment. Africa's forests are believed to contain 45% of the world's remaining bio-diversity and yet in Kenya alone forest cover has decreased from around 20% of total land area to little more than 2%. Forested areas continue to be lost at 5000 ha per year (Kenya Indigenous Forest Conservation Program 1994). The area in and around the Shimba Hills National Reserve in southeastern Kenya is one of only two remaining patches of coastal rain forest in Kenya. It is home to the rare Sable Antelope, many endemic plant species and 'exceptionally high biodiversity' (Davies 1994). Because this area has a significant population of elephants – 'the key to wildlife tourist business in Kenya' (USAID 1991) – a community-based tourism project has been developed. Elephants are now protected at the expense of the ecosystem. Despite serious overpopulation and destruction of the forest (Kiiru 1995; Mwathe 1995; Litoroh 1997; Ndung'u, *et al.* 1997), little is done to remedy the situation. Biodiversity may be perceived as important, but only where it fits with economic objectives.

Assumption 3: Community Conservation is in the best interests of the local people.

It has been suggested that most of the benefits from traditional protected area conservation projects are realized at the national and international level while most of the costs of conservation are borne by local communities (Wells 1992). Community Conservation aims to address this by involving local people in wildlife enterprises. In Kenya, for example, these projects were designed to "increase the socio-economic benefits to communities living adjacent to Kenya's parks and reserves from conservation and sustainable management of wildlife and natural resources" (USAID 1991). However, the most lucrative opportunities for wildlife-related enterprises are already developed by the international and national private sector, leaving mostly small-scale niche market opportunities. To take advantage of these opportunities are usually beyond the means of local communities – particularly in pastoral areas (USAID 1991). This means that the potential revenues and local employment generated by community projects are not particularly large (USAID 1991) and our experience in Kenya suggests that benefits tend to accrue to a limited section of the local community. The disadvantaged sections of the community, cut off from yet another part of their resource base, tend to become even poorer.

Additionally, programs to conserve Kenya's biodiversity are dominated by Western values and philosophies, and generally serve Western interests (Akama, *et al.* 1996). Western fixation with biodiversity conservation, whether right or wrong, should not come at the expense of the poorest of Kenyans who live in ecologically important areas and are forced to conserve when alternatives would be selected by the community. There are instances where Community Conservation projects may not be the best economic use of the land base. In one CC project I studied in Kenya, indigenous people have been convinced by NGO's and government officials to give up their agricultural fields in order to set up a wildlife sanctuary. However, in five years of operation and despite substantial donor support, members of the sanctuary have only received a small dividend on their investment, much less than the agricultural potential of this land. Local people have also been forced to give up access to resources in the area and continue to suffer high levels of human-wildlife conflict.

Assumption 4: Environmental problems are primarily local problems of adjustment, not national problems of policy.

This assumption is rarely explicitly stated; in fact, it is far more common to see contradictory statements. For instance, the Community Conservation literature often points out the importance of national policy to the success of CC initiatives. A report issued by the funding body behind Kenya's COBRA project states that CC projects must be supported by appropriate policy and other reforms (Ndirangu 1997). Evaluations of earlier CC programs in the Amboseli area indicate that governmental policy plays an essential role in program success or failure (USAID 1991: 4-5). Despite these assertions, such lessons appear to be quickly lost in the project's implementation.

Arid and Semi-Arid Lands (ASAL) are home to most of Kenya's remaining wildlife (and pastoralist) populations. Traditional pastoral systems are thought to be the most efficient and sustainable use of this land (Kimani and Pickard 1998) and that these lands are highly amenable to Community Conservation. Nevertheless, pastoralist people continue to be seen as an administrative and developmental problem (Ntiati 1997). The Kenyan government's current goal of agricultural self-sufficiency means that it is encouraging both the sub-division of large tracts of communal lands and the expansion of irrigation in ASAL areas (Southgate and Hulme 1996a). This is in spite of the fact that the partitioning and developing of ASAL land increases the potential for land degradation and crop failures, is incompatible with essential wildlife movements, and threatens key wildlife habitat (Kimani and Pickard 1998, USAID 1991).

One group ranch I studied in Kenya created its own community wildlife sanctuary from a wetland habitat located on the ranch. While this has provided a measure of wildlife protection, governmental policy threatens the long-term survival of the sanctuary. First, water is being diverted from the wetland for adjacent irrigation schemes, along with the cutting and burning of trees to create more cropland. Irrigation continues despite depleted soil quality and evidence of falling water levels in the wetland (Southgate and Hulme 1996b). Second, the governmental goal of promoting subdivision of the remaining group ranches in the district (Government of Kenya 1997) means that the sanctuary may become inaccessible to wildlife. Already the sanctuary has a long, game-proof fence along one side, and agricultural development along another side. While I found that there was enough wildlife in the sanctuary to be of interest to tourists, counts on the perimeter of the sanctuary showed a complete absence of wildlife and high numbers of cattle and people (Rainey and Harris 1999). On the group ranch, I found a number of temporary fences and reports of increased amounts of Maasai dwellings built in preparation for the anticipated subdivision of the group ranch. In essence, national policy is driving the local conservation agenda.

Assumption 5: Indigenous peoples are natural conservationists, and therefore giving local communities tenure over natural resources will ensure that conservation is effective.

This is a continuing debate even amongst conservationists. On the one hand, "experience has shown that wherever local people have been given greater responsibility for managing their own resources, they have shown both the capacity and a willingness to conserve" (Executive Director of UNDP 1995 - quoted in (Sibanda and Omwega 1996)). On the other hand, "people's needs and expectations do not necessarily coincide with conservation objectives" (Noss 1997). The first argument rests largely on the notion that indigenous peoples have traditionally lived in harmony with their ecosystems. However, evidence has mounted that Quaternary extinction of species in many parts of the world were directly the result of human irruption (Leakey and Lewin 1995). Studies of modern attitudes show that little has changed. A review of conservation and development projects worldwide concluded that poor rural communities are primarily concerned with livelihood security issues, and not the conservation of wildlands and their species (Carpenter 1998).

Western organizations promoting conservation assume the indigenous people will find biodiversity conservation an important goal. This assumption is behind most efforts at giving local people tenure over local resources. However, what if local people decide to cut down all trees for firewood? Is this still their right, or is it their right only as long as their desires coincide with conservation priorities? While people in industrialized nations see environmental degradation as a primary concern, marginalized people in the South see day-to-day survival as a primary concern. If local people feel that agriculture rather than

ecotourism is more sustainable, and more likely to offer them a chance at long-term survival or a modicum of prosperity, are conservation groups and organizations willing to support this financially?

The assumption that local people see biodiversity conservation as an important goal also presupposes that local people have the necessary skills and resources to conserve local biodiversity and then to take socio-economic advantage of the local biodiversity. Much has been written about strengthening local community's capacity to manage their natural resources; however, this flies in the face of over a century of Kenyan government policy. For instance, both colonial and independent Kenyan governments denied the legitimacy of traditional Maasai leadership systems. The modern legitimized institutions continued the conversion of the pastoral way of life and wildlife (Ntiati 1997). For example, the Maasai lost the majority of their traditional grazing area when large parts of their range were annexed to provide land for white settlers, and more recently, protected areas. Remaining riverine dry-season grazing areas continue to be lost to irrigated agriculture (Ntiati 1997). In addition to the above there has been little investment in the training of local people to develop the skills to develop and operate their own community-based projects.

CONCLUSIONS AND RECOMMENDATIONS

i. Continued need for international support for conservation efforts

In a review of the economics of conservation in Kenya, Norton-Griffiths and Southey (1995) found that the Kenyan government heavily subsidizes biodiversity conservation and that it would be much more economically productive for the country to turn over protected areas to forestry and agriculture. Where agriculture is a possibility, it does not seem fair that local communities subsidize conservation, especially since conservation is in the interests of a world order where the most obvious beneficiaries are the high consuming middle and upper classes of the North (Brown 1998). It is reasonable that those who promote the benefits of biodiversity conservation should underwrite a good share of the perceived opportunity costs of Community Conservation (Bromley 1994).

ii. Focus on the global scale and the North

It is distressing to see that while conservation efforts are active worldwide, very few efforts focus on some human populations, which are the root cause of conservation issues. The 1992 *Global Biodiversity Strategy* of WRI, IUCN, and UNEP notes that "the roots of the biodiversity crisis are not 'out there' in the forest or on the Savannah, but embedded in the way we live... Excessive consumption of minerals and other non-renewable resources and a gross over-use and waste of energy, especially by the industrialized nations, aggravates these problems." Kline (1998) states that the most important contribution the North could make towards worldwide conservation would be to reign in its materialistic culture and gluttonous appetite for energy and other resources. Instead, northern countries focus efforts on prescribing economic and ecological measures for the countries of the South. Furthermore, conservation programs are framed and dominated by Western environmental and scientific philosophies (Akama *et al.* 1996), and are financed (and ultimately controlled) by Western organizations.

It appears that this will not change in the near future. Although northern nations have rejected cultural imperialism as a philosophy, they seem to have retained policies of economic and ecological imperialism. With this in mind it is necessary to develop additional approaches. G. Brown (*Personal Communication* May 20, 1999) suggested that wildlife should be considered as a global strategic reserve and that funds should be raised for conservation areas at a rate equivalent to the most valuable alternative use of the land. I suggest that there are many other approaches as well and these might include formal commodity/conservation trade agreements.

iii. Don't let the pendulum swing too far

Solutions to the problem of excessive landscape use based on CC principles (such as privatization of tenure and the reinstatement of traditional control systems) are very uncertain routes to poverty alleviation and resource conservation (Inamdar *et al.* 1999a,b). While I agree with the concepts and values behind Community Conservation, it is the blanket application of these principles to all situations and the

unquestioning acceptance of its assumptions that I would like to highlight. For example, the blanket application of a national park policy that would alienated people from their land and resources is open to severe criticism today.

Jeffrey McNeely, the chief scientist at IUCN has argued that the best way to maintain biodiversity in forest ecosystems today is through a combination of different management systems. These include strictly-protected areas, multiple-use areas managed by local people, natural forests extensively managed for long term yield of logs and other products and services, and forest plantations intensively managed for the wood products needed by society (McNeely (undated)). I believe that this principle of using a combination of approaches also applies to conservation initiatives, and especially conservation of ecologically important areas. As Hulme and Murphree (1999) wrote:

Ultimately, the achievement of conservation goals in Africa does not rest on the identification of the right sector (i.e. state or community or market) or the right policy. Rather, it requires a set of governance processes that allow all three actors to operate in the fields of conservation and development while being accountable to the other actors...

Rather than oscillate between strategies of strict protected areas and those promoting community conservation, a more sophisticated strategy would be to manage a portfolio of approaches (Inamdar, *et al.* 1999a,b). There are sensitive and biodiversity rich areas where the maintenance of a strict protected area will be necessary. Other areas are more amenable to using a community-based approach. Solutions that have been implemented in other areas of the world include the zoning of land use and this has lessened conflicts; however, isolated conservation areas are doomed to failure because of reduced genetic flow and movement of wildlife populations during times of stress. This means that conservation corridors must be included in planning conservation on landscapes.

iv. More research into the myths and assumptions behind all conservation models

There is a need for more alternative, testable conservation models that have different degrees of compatibility between development and conservation. Some models will rely more heavily on economics to set the agenda for conservation efforts. Other models will emphasize biodiversity. Still other models will have a strong cultural bias. All models should be testable scientifically and testable by the community. One way to accomplish this may be to set up both community and scientific long-term monitoring of social, ecological, and economic trends in the local area. If conservation projects were established with a view of testing them for effectiveness, it would be possible to analyze results in light of initial expectations and to find common factors of success or failure. In the absence of strong scientific data, beliefs and faith become the foundation for open public debate (Lakatos 1978).

Conservation policies and actions need to be based on realities and those realities include the spatial dimension of conservation areas and how society tolerates temporal change. By spatially stratifying landscapes, conflicts can be reduced, but political boundaries between land uses will always give rise to special concerns. If those boundaries are both ecologically and politically sound, the conflicts will be much reduced. From the temporal point-of-view, rate-of-change tolerance at local, national and international scales is critical. If the rate-of-change increases or decreases sharply, social unrest results. Research could uncover the rates of change that people would tolerate and compare this to the rate-of-change that conservation of biodiversity will tolerate without collapse.

LITERATURE CITED

African Wildlife Foundation, *Conservation of Biodiverse Resource Areas (COBRA), AWF Sub-Contract Report, Summary of Issues, Activities and Lessons Learned, 1993-1996*, (Nairobi: AWF, 1997).

Akama, J. S., C. L. Lant, and G. W. Burnett, "A Political-Ecology Approach to Wildlife Conservation in Kenya," *Environmental Values* Vol. 55 (1996) pp. 335-347.

Ashley, C. and D. Roe, *Enhancing Community Involvement in Wildlife Tourism: Issues and Challenges*, (London: IIED, 1998).

Brohman, J., "Environment and Sustainability," in *Popular Development*. (Cambridge: Blackwell Publishers, 1997). pp. 305-323.

Bromley, D. W., "Economic Dimensions of Community-based Conservation," in D. Western, R. M. Wright and A. E. Shirley C. Strum (Eds.), *Natural Connections: Perspectives in Community-based Conservation*, (Washington, D.C.: Island Press, 1994), pp. 428-447.

Brosius, J. P., A. L. Tsing., and C. Zerner., "Representing Communities: Histories and Politics of Community-Based Natural Resource Management," *Society & Natural Resources*, Vol. 11, No. 2 (1998), pp. 157-168.

Brown, D., "Participatory Biodiversity Conservation - Rethinking the Strategy in the Low Tourist Potential Areas of Tropical Africa," *ODI - Natural Resource Perspectives Number 33*, (London: Overseas Development Institute, 1998).

Carpenter, J. F., "Internally Motivated Development Projects: A Potential Tool for Biodiversity Conservation Outside of Protected Areas," *Ambio* Vol. 27, No. 3 (1998), pp. 211-216.

Cummings, F. H., "Role of Participation in the Implementation and Evaluation of Development Projects," *Knowledge & Policy*, Vol. 10, No. 1 (1997), pp. 24-34.

Davies, G., "The Shimba Hills: Where East African Species Meet West African Species, and Forest Meets Savanna," *SWARA* (June, 1994), pp. 25-27.

Government of Kenya, World Bank, and the International Monetary Fund, *Kenya Economic Reforms for 1996-1998: The Policy Framework Paper*, Internet document: (<http://www.imf.org/external/np/pfp/kenya/kenya.pdf>). Access date: March 27, 2000.

Government of Kenya, *Kajiado District Development Plan 1997-2001*, (Nairobi: Office of the Vice-President and Ministry of Planning and National Development, 1997).

Goodland, R., "The Case That the World has Reached Limits: More Precisely, That Current Throughput Growth in the Global Economy Cannot Be Sustained," in R. Goodland, H. Daly, S. E. Serafy and B. von Droste (Eds.), *Environmentally Sustainable Economic Development: Building on Brundtland*, (Paris: UNESCO, 1991), pp. 15-27.

Hackel, J. D., "Community Conservation and the Future of Africa's Wildlife," *Conservation Biology*, Vol. 13, No. 4, (1999), pp. 726-734.

Hulme, D. and M. Murphree, "Communities, Wildlife, and the 'New Conservation' in Africa," *Journal of International Development*, Vol. 11 (1999), pp. 277-285.

International Institute for Environment and Development, *Whose Eden? An Overview of Community Approaches to Wildlife Management*, (London: IIED, 1994).

Inamdar, A., D. Brown, S. Cobb, "What's Special About Wildlife Management in Forests? Concepts and Models of Rights-based Management, With Recent Evidence From West-Central Africa," *ODI - Natural Resource Perspectives Number 44* (London: Overseas Development Institute, 1999a).

Inamdar, A., H. de Jode, K. Lindsay, S. Cobb, "Capitalizing on Nature: Protected Area Management," *Science*, Vol. 283, (March 19, 1999b). pp. 1856-1857.

Kenya Indigenous Forest Conservation Programme (KIFCON), *Phase 1 Report*, Mimeo (Nairobi: KIFCON, 1994).

Kiiru, W., *Human-Elephant Interaction around Shimba Hills National Reserve, Kenya*, MSc thesis (Harare, Zimbabwe: University of Zimbabwe, 1995).

Kimani, K. and J. Pickard, "Recent Trends and Implications of Group Ranch Sub-division and Fragmentation in Kajiado District, Kenya," *The Geographical Journal*, Vol. 164, No. 2 (1998), pp. 202- .

Kline, G., "Biodiversity and Development," *Journal of Third World Studies*, Vol. 15, No. 1 (1998), pp. 125-139.

Koch, E., *Reality or Rhetoric? Ecotourism and Rural Reconstruction in South Africa*, (Geneva: United Nations Research Institute for Social Development, 1994).

Kremen, C., A. M. Merlender, D. D. Murphy, "Ecological Monitoring: A Vital Need for Integrated Conservation and Development Programs in the Tropics," *Conservation Biology*, Vol. 8, No. 2 (1994), pp. 388-397.

Kenya Wildlife Service, *A Policy Framework and Five-Year Investment Programme 1990/91 - 1995/96*, (Nairobi: Kenya Wildlife Service, 1990).

Lakatos, I., "Falsification and the Methodology of Scientific Research Programmes," in J. Worrall and G. Currie (Eds.) *The Methodology of Scientific Research Programmes*, (Cambridge: Cambridge University Press, 1978).

Leach, M., R. Mearns, I. Scoones, "Environmental Entitlements: Dynamic and Institutions in Community-Based Natural Resource Management," *World Development*, Vol. 27, No. 2, (1999), pp. 225-247.

Leakey, R., "Food for Thought," *Swara*, Vol. 21, No. 3 (1998), pp. 4-10.

Leakey, R. and R. Lewin, *The Sixth Extinction: Biodiversity and its Survival*, (New York: Doubleday, 1995).

Litoroh, M., *Shimba Elephant Aerial Survey (A Minimum Total Count)*, Mimeo (Kwale: Kenya Wildlife Service, 1997).

Lugard, F. D., modernized by J. S. Arkenberg, "The Rise of Our East African Empire," *Internet Modern History Sourcebook*, <http://www.fordham.edu/halsall/mod/1893lugard.html>, Access date: January 24, 2000.

McNeely, J. A., *Lessons from the Past: Forest and Biodiversity*, (Gland: IUCN, undated).

Mwathe, K. M., *Elephant-Habitat Interaction Study in Shimba Hills National Reserve*, Mimeo (Nairobi: Kenya Wildlife Service Elephant Program, 1995).

Ndirangu, J., *A Synopsis of the Evolution of Community Conservation in Kenya* 13th International Seminar on Forestry and Natural Resources Administration and Management, Colorado State University, August 24-September 18, 1997).

Ndung'u, M., B. Kaaria, G. Awich, *Assessment of WDF Funded Projects/Activities in Coast Region*, Mimeo (Nairobi: Kenya Wildlife Service, 1997).

Norton-Griffiths, M., *Why Kenyan Conservation is Failing*, *SWARA*, November 1996/February 1997, pp. 6-8.

Norton-Griffiths, M. and C. Southey, "The Opportunity Costs of Biodiversity Conservation in Kenya," *Ecological Economics*, Vol. 12 (1995), pp. 123-139.

Noss, A. J., "Challenges to Nature Conservation with Community Development in Central African Forests," *Oryx*, Vol. 31, No. 3, (1997): 180-188.

Ntiati, P., *Conflict Between Wildlife Conservation and the Sedenterization of the Pastoral People: A Case Study of the Maasai of Kenya*, MA Thesis (Reading: University of Reading, 1997).

Rainey, M. and E. Harris, *Comments and Analysis on the Amboseli and Associated Group Ranch Counts 7th February to 12th February 1999*. Mimeo (Nairobi: 1999).

Robinson, J. G., "The Limits to Caring: Sustainable Living and the Loss of Biodiversity," *Conservation Biology*, Vol. 7 (1993), pp. 20-28.

Sibanda, B. M. C. and A. K. Omwega, "Some Reflections on Conservation, Sustainable Development and Equitable Sharing of Benefits from Wildlife in Africa," *South African Journal of Wildlife Research*, Vol. 26, No. 4, (1996), pp. 175-182.

Southgate, C. and D. Hulme, *Environmental Management in Kenya's Arid and Semi-Arid Lands: An Overview*, (Manchester: Institute for Development Policy and Management, 1996a).

Southgate, C. and D. Hulme, *Land, Water and Local Governance in a Kenyan Wetland in Dryland: The Kimana Group Ranch and its Environs*, (Manchester: Institute for Development Policy and Management, 1996b).

Spinage, C., "Social Change and Conservation Misrepresentation in Africa," *Oryx*, Vol. 32, No. 4 (1998), pp. 265-276.

Turner, M. D., "Conflict, Environmental Change, and Social Institutions in Dryland Africa: Limitations of the Community Resource Management Approach," *Society & Natural Resources*, Vol. 12, No. 7 (1999), pp. 643-658.

United Nations Development Program, *Human Development Report 1998*, (New York: Oxford University Press, 1998).

United States Agency for International Development, *Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247)*, Mimeo (Nairobi: USAID, 1991).

United States Agency for International Development, *The USAID FY 1998 Congressional Presentation*, Internet Document: <http://www.info.usaid.gov/pubs/cp98/afr/countries/ke.htm>, Access date: March 26, 2000.

Wack, H. W., *The Story of the Congo Free State*, (New York: The Knickerbocker Press, 1905).

Wells, M., "Biodiversity Conservation, Affluence, and Poverty: Mismatched Costs and Benefits and Efforts to Remedy Them," *Ambio*, Vol. 21 (1992), pp. 237-242.

Western, D., R. M. Wright, S. C. Strum, (Eds.), *Natural Connections: Perspectives in Community-based Conservation*, (Washington: Island Press, 1994).

World Bank, *World Development Report 1992: Development and the Environment*, (Washington D.C.: Oxford University Press, 1992).

The World Conservation Union (IUCN), *World Conservation Strategy: Living Resource Conservation for Sustainable Development*, (Gland, Switzerland: The World Conservation Union, 1980).

CHAPTER III: FORTRESS VS. COMMUNITY CONSERVATION IN EAST AFRICA: A CONCEPTUAL VIEW OF FACTORS LEADING TO SUCCESS

INTRODUCTION

While the concept and practice of biodiversity conservation has long been an issue, it has become a crucial concern as societies decide how to meet the needs of rapidly expanding human populations. Geographically, the highest human population growth has occurred in tropical areas that contain the majority of the world's remaining biodiversity (Myers et al. 2000). In the past, when humans less intensively influenced landscapes, conservation solutions focused on separating conservation and development - maximizing development in certain areas in order to maximize biodiversity in others. This approach to conservation, popularly known as 'Fortress Conservation' (FC) (Wells and Brandon 1992), is characterized by centralized control of resources by government, the separation of conservation and production, and conservation as preservation. This approach has fallen under mounting criticism ranging from its failure to address issues of social justice to its lack of success in stemming losses of biodiversity (IIED 1994). The new dominant paradigm in conservation, especially in the non-industrialized countries of the South, is known as Community-Based Conservation, or simply Community Conservation (CC). CC focuses on conservation and development as a synchronous process integrating people and wildlife (and more broadly biodiversity). It is characterized by decentralization, control of resources by local communities, integration of conservation and production, and conservation as wise and long-term use of resources.

While CC has several philosophical roots, such as neo-liberal globalism and the linkage of conservation and sustainable development (Hulme and Murphree 1999), the crucial variable in CC initiatives is ownership and control of land and resources (Barrow and Murphree 1999). While there is a tendency to view projects as being either completely owned and controlled by the government (FC) or the local community (CC), in reality most conservation initiatives are located on the gradient between these two extremes. In addition, the concept of CC has risen to such high favor that almost all conservation projects are labeled as CC projects. The lack of specificity and the resulting widespread use of the term, however, belie the tension within projects. In Africa CC has become the new dominant paradigm behind both community development projects (Turner 1999) and conservation projects (Hackel 1999). Most projects therefore assume that the two goals of conservation and development are mutually inclusive; the reality is that most projects address one at the expense of the other. There are two main reasons why this is so.

The first reason is that most organizations have a primary mandate of either conservation or development, rarely both. Development organizations generally view conservation as a means to achieve development goals, and therefore tend to put development priorities above conservation priorities. For example, an overview of the World Bank Group in Africa's policy for sub-Saharan Africa¹ states that:

As part of the Bank-wide decentralization effort, the Africa Region is piloting the creation of multi-disciplinary, multi-donor hubs to support the new emphasis on rural development. An essential element of the rural development assistance strategy though must be efforts to support environmental sustainability and community-based natural resource management.

Millions of rural Africans are dependent on natural resources for both their often-fragile food security and their meager incomes. An important challenge is the building of capacity in Africa for environmental management. Much of the work done so far has been at the public level, but more effort is needed to involve the private sector and to alert Africans to *ways in which successful management of the environment can enhance development progress* [emphasis ours].

Such policy leads to projects located on the CC side of the continuum, and which criticize FC projects for not paying enough attention to development priorities such as community empowerment and participation. In contrast, conservation organizations generally view community development as a means to achieve

¹ The World Bank Group in Africa: An Overview. Available at: <http://www.worldbank.org/afr/overview.htm> (Access date May 8, 2000)

conservation goals, and therefore tend to put conservation priorities above development priorities. For example, a recent publication discussing the link between population and biodiversity reports that:

"Most of the larger conservation organizations – IUCN, WWF, Conservation International among them – have integrated social scientists into their professional (and biologically trained) staff. These organizations see the need to influence social and economic conditions, including those that affect population growth, *so that their biological programs can succeed* [emphasis ours]" (Cincotta and Engelman 2000).

Such actions tend to create projects located on the FC side of the continuum, and criticize CC projects as not paying enough attention to conservation priorities such as the maintenance of strict protected areas.

The second reason why most projects do not give equal value to conservation and development is that there are few geographic areas where this is possible. Usually a series of tradeoffs must be made because of human population pressures. Conceptually, urbanization and agriculture are more amenable to development activities while forestry and wilderness are more amenable to conservation and maintenance of biodiversity. While society can work towards minimizing impacts all along the gradient from urbanization to wilderness, development activities will always come at the expense of conservation and biodiversity conservation.

Achieving conservation goals is not simply about making a choice between state-centered or society-centered approaches (Hulme and Murphree 1999), but rather about adopting a range of strategies that reflect the full range of local biodiversity and cultures. Likewise, there is no 'unique and objective' solution to the management of natural resources, but rather a multiplicity of different options compatible with scientific knowledge and capable of meeting the needs of conservation and development (Borrini-Feyerabend 1999). I suggest that we adopt a gradient - mosaic approach; practicing different tradeoffs in different places in order to create a patchwork of areas variously dedicated to strict protection, natural resource production, or intensive use (Alpert 1996). Within these areas, projects must be tailored to the specific cultural, socioeconomic, and historical contexts of individual communities (Horowitz 1998). This should involve a dynamic mix of state, community, and private action, not the dismissal of one of these sectors to the sidelines (Hulme and Murphree 1999).

THE CRITERIA

Adopting a 'gradient and mosaic' approach to conservation and development means that we must determine both our conservation and our development priorities, and then establish which areas are most amenable to which strategies within these priority areas. Because the critical need in most areas of the world appears to be conservation, I propose determining ecological priorities first. Within ecological priority areas, it must be determined what types, intensities, and zonations of resource use are compatible with the conservation of biodiversity and the maintenance of ecological processes (Alpert 1996). The types of communities, institutions, and policies most likely to achieve conservation objectives must also be determined.

In this paper I am using our experience in Africa in determining specific criteria that have been identified as crucial to the success or failure of CC projects. Criteria were gathered from a review of the literature and from our recent discussions in Kenya with community members, government officials, and conservation officers involved with CC projects. While some criteria were widely recognized and accepted, others engendered their share of controversy. All factors identified, regardless of the amount of controversy or repetition, were included. The criteria were then organized along major criteria and sub-criteria.

i. Political

For an early attempt at CC in Kenya, Western, Wright and Strum (1994) concluded that "...the biggest single failing was at governmental and institutional levels". Other authors have also pointed out the importance of political and policy support (Bank 1996; Brown 1999; IIED 1994; Richards 1996; Treseder

1999; USAID 1991). This includes the importance of national political stability and infrastructure development (Brown 1999), and of local power politics (Ahluwalia 1997). Ownership determines where a project falls on the continuum of conservation. The degree of security of ownership and control is an important factor in determining the success or failure of a project. As numerous authors have noted, the community's rights to ownership and tenure of wildlife resources must be secured in order for people to be motivated to conserve (Bank 1996; Horowitz 1998; IIED 1994; Ndirangu 1997; Watson 1998)

ii. Community

The criteria describing communities that are compatible with CC projects are controversial, in part because of the confusion over what defines 'community' (Barrow and Murphree 1999). One such factor is social equity amongst members of the community (Agrawal and Gibson 1999). It has been argued that extreme social inequalities at the local level reinforce the control of benefits by local elites (Bank 1996), and therefore social equity is a prerequisite to creating the socioeconomic incentives and sociopolitical stability that good resource stewardship requires (Freese 1998). While social equity may be important to organizations with a political or social justice agenda, there is little evidence that socially equitable societies are more sustainable than non-equitable societies. For example, it can be argued that while traditional Maasai culture was non-equitable in its treatment of women and children, it was an effective society. Another controversial criterion is the importance of a stable, homogenous community, which has been variously proposed as important (Gibson and Koontz 1999; Noss 1997) and not important (Agrawal and Gibson 1999). A less controversial factor is a shared conservation ethic (Noss 1997). This includes, for example, a belief in the importance of protecting local endangered species (Horowitz 1998). Finally, various authors mention the importance of the local attitudes such as respect for local authority and a cultural framework that includes beliefs, morality, and a sense of community (Horowitz 1998; Richards 1996).

iii. Institutional

Effective community institutions are an essential element of successful CC projects. Of critical importance are transparency and accountability (Brockington and Kiwasila 1997; IIED 1994; McNeely 1993), which should ensure a fair distribution of benefits. How to distribute benefits is not so clear. Some authors argue for an equitable distribution of benefits (Watson 1998); Leach, Mearns and Scoones (1999) mention that projects should not marginalize social groups, while (Barrow and Murphree 1999) mention that projects where the maximum number of a community or group benefit stands the greatest chance for long-term sustainability. Others, such as (Dobson 1998), question this and claim that fairer distribution of resources does not always produce more sustainable outcomes. These authors point to the importance of ensuring that differential contributions must result in differential benefits (Murphree 1993). There must be a positive correlation between quality of management and the magnitude of the benefit (Murphree 1993), and the costs and responsibilities of each stakeholder must be closely related to rights and benefits (World Bank 1996). In addition, effective community institutions must have control of immigration (Brown 1999; McNeely 1993; Noss 1997). Because controls on immigration require a spatially delimited area, a closely related factor is demarcation (Barrow and Murphree 1999). The demarcated area must be as small as possible, such that the unit of proprietorship must be the unit of production, management and benefit (Murphree 1993). Most authors point out the importance of community participation. This includes stakeholder analysis and consultation (Bank 1996; Brockington and Kiwasila 1997; McNeely 1993), taking community goals and perspectives into account (Barrow and Murphree 1999; IIED 1994; Leach, Mearns and Scoones 1998), and having local communities define rules regarding membership, responsibilities and benefits (World Bank 1996). There must be clear agreements in place as to the roles, rules, and procedures for the various partners involved in the CC project (Ndirangu 1997). This includes agreements on management, investment priorities, and revenue cost-sharing arrangements (USAID 1991) along with the establishment of appropriate forums for negotiation (Brockington and Kiwasila 1997). The agreements must be able to deal with equity issues (IIED 1994), include management rules that the entire community understands and has an incentive to monitor and enforce (Bank 1996), and provide effective community self-regulation and protection from potentially conflicting land uses (Treseder 1999). These agreements must be based on a clear understanding of the dynamic arrangement behind local management of natural resources (Leach, Mearns and Scoones 1999).

Unfortunately, the vast majority of CC projects are located in areas lacking institutions that have the above characteristics. To overcome this deficiency, it is important to include capacity building at all levels (Bank 1996; Brockington and Kiwasila 1997; IIED 1994; Murphree 1993; Treseder 1999). This includes resources dedicated to training in basic business, accounting and management skills. In poor, rural areas where residents have little formal education, it is important that there is a long-term commitment to the process (Brown 1999; IIED 1994; Leach, Mearns and Scoones 1999; Ndirangu 1997). Because most projects have a time frame of only two to three years, some authors have mentioned the importance of a long-term advocates/mentors (Ndirangu 1997) and/or the importance of having strong local leadership.

iv. Economic

Of all the aspects of a successful project mentioned in the literature, the importance of economic benefit to the community has received the most attention. Some authors state that it is only necessary that communities see a clear, direct link between conservation and economic benefit (Horowitz 1998; McNeely 1993; Richards 1996). In order to achieve this, the community must benefit through the consumptive or non-consumptive use of their natural resources (Getz et al. 1999; Western, Wright and Strum 1994). Other authors say that it is not enough to just receive some level of economic benefit, but that the benefits of the project must outweigh the costs (Bank 1996; Barrow and Murphree 1999; Brockington and Kiwasila 1997; Horowitz 1998; IIED 1994; Inamdar et al. 1999; Murphree 1993). This includes the social and cultural costs and benefits of the project (Gibson and Marks 1995; Ntati 1997). For instance, one criteria mentioned is that natural resources must be available for commercial use without subtracting from the amount necessary for subsistence use (Treseder 1999; Watson 1998)². Another aspect is a clear incentive for communities, either through a pressing conservation need or through a crisis in the local economy (Brown 1999; Ndirangu 1997). Although CC projects such as TANAPA and CAMPFIRE started and continued without significant external support (Barrow and Murphree 1999), the majority of CC projects are unlikely to generate net economic returns. If the benefits do not outweigh the costs and the area is of sufficient ecological value, it may be necessary to enlist long-term, external financial support to ensure the long-term financial viability of the project (Ndirangu 1997; Noss 1997; Alpert 1996; Anonymous 1997; Gibson and Marks 1995; IIED 1994).

v. Ecological

Too little attention has been paid in the literature to ecological criteria for successful CC projects. More attention has been paid to which types of land use and livelihoods are most conducive to CC projects. For instance, a report issued by the KWS (1995) divided Kenya into two areas: those areas compatible with wildlife (i.e. pastoralist areas) and those not (i.e. agricultural areas). Although some authors argue that agro-pastoralism may be an effective livelihood strategy for CC projects, the importance of low agricultural potential appears to be a more common theme. The value of wildlife compared with alternative land uses must be high, and this precludes most areas with agricultural potential (Getz et al. 1999; IIED 1994). Cunningham (1995) argues that if biodiversity conservation is a goal, local control is less likely to achieve this goal where agricultural potential is high. Under these ecological concerns, state control needs to be strong if biodiversity and habitat conservation is of primary concern (Campbell et al. 1999). Evidence also points to the importance of a low human to resource density. To succeed, conflicts over resources must not be too intense (Bank 1996), and small communities tend to be less prone to conflict than large ones (IIED 1994). In addition, economic benefits are often overestimated except where communities are small and wildlife is abundant (IIED 1994). In the case of CAMPFIRE, success is more likely in areas where human population densities are low and elephant population densities are high (Campbell et al. 1999). At the same time, the ratio of human to wildlife population density cannot be too low (Bank 1996). In a study of five forests in India, it was found that somewhat larger communities are better able to raise the needed resources to hire forest guards to monitor use (Agrawal 1994).

² However, this assumes certain types of lifestyles. In certain areas the population density is so high that the land can no longer support it, except through intensive agriculture relying on external inputs

MODELING THE APPROACH

In strict nature reserves (located on the FC side of the spectrum), a high emphasis is placed on the *intrinsic*³ value of nature. Such reserves involve little if any consumptive use of nature, and thus meet few if any *utilitarian*⁴ goals. While the conservation value of such areas may be great, they may fail to meet the needs of nearby communities. The conservation effectiveness of such areas is strongly influenced by the inherent characteristics of the surrounding community, ecological and political structures. For instance, in areas with a high human to resource ratio (one of the ecological criteria) developmental pressures and desire for access to the resources in the reserve may place detrimental public pressure on the reserve⁵. As control of resources shifts from public to private ownership, in most cases nature and natural resources will increasingly be used to achieve *utilitarian* goals. In projects located on the CC side of the spectrum, the total benefits flowing to conservation are often limited by the lack of emphasis on the intrinsic value of nature. Utilitarian uses invariably involve some form of development, and development results in some loss of biodiversity (Kremen, Merenlender and Murphy 1994). The conservation effectiveness of such projects is strongly influenced by the 'sophistication' or effectiveness of the community and the programs instituted. This includes all of the criteria I have listed under 'community' and 'institutional' above. For instance, communities without a strong conservation ethic (one of the community criteria) may enact strong agreements about long term forest cutting or fishing, but do little or nothing to preserve species that have little or no economic relevance (Adams and Hulme 1998). These two lines of *intrinsic* and *utilitarian* value are modeled conceptually in Figure 3.1. The total benefit flowing to conservation is found in the lower area of the graph bounded by these two lines, while the maximum level of benefit is found at the intersection of the two lines. Each project will have different total benefits to conservation, based on the slope of these two lines and their intersection point. The inclusion of the ecological, political, and economic considerations listed above can give an approximation of project effectiveness in capturing the *intrinsic* benefits of conservation as protection of biodiversity. The presence of the community and institutional criteria listed above will tend to increase the effectiveness of projects to capture the *utilitarian* benefits of conservation.

I believe that there are two strengths to this conceptual model. First, it provides an approximation of which combination of FC and CC will result in maximum benefits flowing to conservation in any particular area. This is not to say that this should be our goal in every situation. For instance, in Figure 3.1, changing the conservation approach from strongly public to strongly private results in very little change in terms of benefit flowing to conservation, but allows the surrounding community to meet more of its developmental goals. The appropriate approach for a particular area must depend on the relative value of conservation and development. Second, understanding which criteria influence the relative position and slope of the *intrinsic* and *utilitarian* lines will help us to determine the most effective strategy to increase the total benefit to conservation.

CASE STUDIES

I apply this model to two case studies from our recent experience studying CC projects started under the Kenya Wildlife Service's COBRA (Conservation of Bio-Diverse Resource Areas) program. I assume that increasing or decreasing the effectiveness of the *utilitarian* benefits to conservation increases or decreases the slope and relative position of this line. Conversely, increasing or decreasing the effectiveness of the *intrinsic* benefits to conservation increases or decreases the *negative* slope and relative position of this line.

³ *Intrinsic value of nature* here is defined as preservation of non-human species for their own sake. This is essentially a biocentric approach to conservation, focused on the rights or needs of non-human species (Adams & Hulme 1998).

⁴ *Utilitarian value of nature* here is defined as wise use of resources for greater human benefit. This is essentially an anthropocentric approach to conservation focused on human needs and benefits (Adams & Hulme 1998).

⁵ This can take the form of industry and special interest groups lobbying the government for access to the resources in the reserve, or of poaching and illegal gathering of resources from within the reserve.

i. The Mwaluganje-Golini Community Elephant Sanctuary:

This Sanctuary is located on a natural corridor between the Shimba Hills National Reserve (to the south) and the Mwaluganje Forest Reserve (to the north) in the Coast Province. The sanctuary is bordered by a cliff face to the east, and by drier predominantly rangelands to the west. Stakeholders include original inhabitants of the area (the Duruma and Digo people), farmers who have moved into the area starting with a colonial resettlement scheme in the 1950's, government employees, affluent locals who have purchased land in or around the sanctuary for aesthetic or business reasons, and national and international conservation groups. Before creation of the sanctuary, the land was used by local residents for both rain-fed and irrigated agriculture, for gathering construction and fuel wood, and for the collection of non-timber forest products. A rapid expansion in the local elephant population starting in the 1970's led to increasing human-wildlife conflict. Attempts by the Kenya Wildlife Service to control problem animals failed, and it became clear that farming and elephants were mutually exclusive. Although initially encountering strong opposition from the local community, a proposition by the Kenya Wildlife Service and several community members to turn this area into a community-owned elephant sanctuary slowly gained momentum. In an attempt to minimize human-wildlife conflict, an electric fence was built around the proposed sanctuary. Effectively, this forced out those who were still farming in the sanctuary area. A large hotel chain on the coast (whose owners also bought substantial tracts of land both inside and outside of the sanctuary) built a tourist lodge within the sanctuary. The sanctuary opened for business in late 1995. Because of initial questions of land ownership and subsequent low numbers of tourists due to El Niño rains, only one membership dividend had been paid at the time of our field study (May 1999). An examination of the sanctuary in view of the five criteria and 20 sub-criteria allows a determination of the approximate slopes of the lines in Figure 3.2. In terms of the utilitarian benefits of conservation in the sanctuary area, there is a balance of factors that provides no clear contribution to conservation. In terms of the intrinsic benefits of conservation, most factors work to decrease the effectiveness of the project; a policy of protecting all elephants in the sanctuary at the expense of biodiversity has been heavily criticized, the costs of the project outweigh benefits for local people, there is no clear linkage between conservation and benefits, the area has high agricultural potential, and there is a high human to resource density. For the Mwaluganje Community Elephant Sanctuary, the best strategy for achieving maximum conservation benefits at the present time is limited local community control of the sanctuary (see Figure 3.2).

With present management policies there is not only a low level of benefits flowing to conservation but also a low level of benefits flowing to development and a high level of human-wildlife conflict. It seems that a decision must be made as to the relative importance of conservation and development. Barring such a decision, an approach to maximize both the levels of conservation and development should initially focus on changing the position and slope of the 'intrinsic' line. Changing the agricultural potential of the sanctuary or the human to resource density is not an option in this case, but securing outside financial support for the sanctuary that would flow to local people through secure employment is a possibility. This would help to offset the costs of the sanctuary and establish a clearer link between conservation and benefits. Effort should be made to address the problem of elephant over-population in the sanctuary, which would help to preserve the ecological integrity of the sanctuary and lessen human-wildlife conflict. These factors would probably change the position of the line enough to allow for both greater community control (and therefore more effort to flow to development) and for more total benefit to flow to conservation efforts. Another option would include translocation of elephants to the neighboring and under-populated Tsavo National Park as might have occurred in the past. This solution may help to preserve the high numbers of endemic plant species in the area.

ii. The Il Ngwesi Tourist Lodge:

Located on the Il Ngwesi Group Ranch in Laikipia District, the lodge is actually made up of a small number of cottages, or 'bandas', that can be rented on a daily basis. Despite their isolated location, the bandas have a high occupancy rate. While group ranch members supplied the land and labor for construction, funding for the lodge came from national and international conservation and development groups, and management and training came, and continues to come, from neighboring private ranches and volunteers. The lodge opened in December 1996 and has gained local and international attention as a CC success story. An examination of the Il Ngwesi Tourist Lodge in light of the five criteria and 20 sub-

criteria is shown in Figure 3.3. The majority of the characteristics of the criteria tend to increase the intrinsic benefit of conservation. The land in the group ranch has very low agricultural potential, there is strong political and policy support for the programs, there is a low human to resource density, and the benefits of the program appear to be greater than the costs. In terms of utilitarian benefits, the majority of the factors tend to increase benefits. These include a stable, homogenous population with a shared conservation ethic, a level of transparency and accountability, long-term local mentors committed to the project, effective community institutions, controls on immigration, capacity building, and, finally, differential contributions result in differential benefits. It is clear that the solution in terms of maximizing both conservation and development would be a high level of community control.

DISCUSSIONS AND CONCLUSIONS

CC has received increased attention over the last two decades as a solution to modern problems of biodiversity conservation, especially in the developing world. The basic concept of decentralized control over natural resources is not new. The present day situation in sub-Saharan Africa has remarkable similarities to Europe in the 16th century. Then, as now, population and land pressures forced a change from public (state) to private ownership of natural resources (Hudson 1993). The Europe of today has certainly seen much more effort put into development than conservation. For instance, while Europe is home to 16 of the top 20 developed countries in the World (as ranked by the UNDP), it has retained only 1% of its original forested area (half of this is also under siege) (UNDP 1998). Our hope is that regions of the world like East Africa can achieve both conservation and development, not one at the expense of the other. While integrating these two processes is an important strategy in achieving sustainability, paying attention to environmental issues while promoting agriculture is not the same as conservation; conversely, paying attention to the needs of human populations surrounding protected areas is not the same as community development.

Our case studies of CC projects (small aboriginal groups living mostly traditional lifestyles) are only possible in relatively undeveloped landscapes such as segments of deserts and rainforests. Moreover, as developmental pressures reach to all corners of the earth, there are few areas left compatible with strict FC. For most of the earth, difficult choices must be made on the relative importance of conservation and development and on using a variety of approaches to meet both needs. All societies recognize that some ecologically fragile areas have limited possibilities for development, while some cities and intensive agricultural areas have limited possibilities for conservation. I suggest that new development projects should be as environmentally benign as possible and new conservation projects should consider development where possible. Protecting biodiversity will require a multi-faceted strategy. It will also require addressing issues of over-consumption, poverty and underdevelopment, population pressure, social justice, community empowerment, war and epidemics.

I believe the value of the proposed Conservation Benefits Model is as a conceptual tool. One, the model can help one in gaining an understanding of which conservation strategies will optimize conservation benefits. Two, the model may be useful in developing strategies of intervention for improving both conservation and development in specific areas. Three, an application of the model requires a strong understanding of the community and institutions, of the ecological and political processes and of the economic realities of an area: something that is often lacking in both conservation and development projects. Four, attempts to apply the model will encourage practitioners to collect more quantitative data. This is a major challenge since few if any projects have sufficient data to mathematically model the dynamics of alternative management strategies.

LITERATURE CITED

- Adams W.M. and Hulme D. (1998) Conservation and Communities: Changing Narratives, Policies and Practices in African Conservation. Working Paper No. 4, Institute for Development Policy and Research, Manchester
- Agrawal A. (1994) Small is beautiful, but could larger be better? A comparative analysis of five village forest institutions in the Indian Middle Himalayas. Oxford Forestry Institute, Oxford, India

- Agrawal A. and Gibson C.C. (1999) Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation. *World Development* 27(4): 629-649
- Ahluwalia M. (1996) Representing Communities: The Case of a Community-Based Watershed Management Project in Rajasthan, India. *IDS Bulletin* 28(4): 23-35
- Alpert P. (1996) Integrated Conservation and Development Projects. *BioScience* 46(11): 845-855
- Anonymous (1996) COBRA Assessment - Discussion Draft. USAID, Nairobi
- Barrow E. and Murphree M. (1999) Community Conservation From Concept to Practice: A Practical Framework. Institute for Development Policy and Management, Manchester
- Borrini-Feyerabend G. (1999) Participatory Management of Natural Resources. October 1999. Available at: <http://nrm.massey.ac.nz/changelinks/pmnr.html>
- Brandon M.W. and Brandon K. (1992) People and Parks: Linking Protected Area Management with Local Communities. The World Bank, Washington, D.C.
- Brockington D. and Kiwasila H. (1997) Conservation with development in East African rangelands: a case study from Tanzania. Ph.D. thesis, University College, London
- Brown D. (1999) Participatory Biodiversity Conservation - Rethinking the Strategy in the Low Tourist Potential Areas of Tropical Africa. ODI - Natural Resource Perspectives 33, London
- Campbell B., Bryon N., Hoban P., Madzudzo E., Matose F. and Wily L. (1999) Moving to Local Control of Woodland Resources - Can CAMPFIRE Go Beyond the Mega-Fauna? *Society & Natural Resources* 12(5): 501-510
- Cincotta R.P. and Engelman R. (2000) Nature's Place: Human Population and the Future of Biodiversity. Population Action International, Washington D.C.
- Dobson A. (1998) Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice. Oxford University Press, London
- Elliot J. and Mwangi M.M. (1998) Developing Wildlife Tourism in Laikipia, Kenya - Who Benefits? African Wildlife Foundation, Nairobi
- Freese C.H. (1999) Wild Species as Commodities. Island Press, Washington D.C.
- Getz W.M., Fortmann L., Cumming D., du Toit J., Hilty J., Martin R., Murphree M., Owen-Smith N., Starfield A.M. and Westphal M.I. (1999) Sustaining Natural and Human Capital: Villagers and Scientists. *Science* 283(19): 1855-1856
- Gibson C.C. and Koontz T. (1998) When "Community" Is Not Enough: Institutions and Values in Community-Based Forest Management in Southern Indiana. *Human Ecology* 26(4): 621-647
- Gibson C.C. and Marks S.A. (1995) Transforming Rural Hunters into Conservationists: An Assessment of Community-Based Wildlife Management Programs in Africa. *World Development* 23: 941-957
- Hackel J.D. (1999) Community Conservation and the Future of Africa's Wildlife. *Conservation Biology* 13(4): 726-734
- Horowitz L.S. (1998) Integrating Indigenous Resource Management with Wildlife Conservation: A Case Study of Batang Ai National Park, Sarawak, Malaysia. *Human Ecology* 26(3): 371-403

- Hudson R.J. (1993) Origins of Wildlife Management; The Western World. In: Hawley AWL (ed.) *Commercialization & Wildlife Management - Dancing with the Devil*, pp.5-21. Krieger Press, Melbourne
- Hulme D. and Murphree M. (1999) Communities, Wildlife, and the 'New Conservation' in Africa. *Journal of International Development* 11: 277-285
- IIED (1999) Eden Update - Newsletter of the Evaluating Eden Project. International Institute for Environment and Development, London
- IIED (1994) Whose Eden? An Overview of Community Approaches to Wildlife Management. International Institute for Environment and Development, London
- Inamdar A., de Jode H., Lindsay K. and Cobb S. (1999) Capitalizing on Nature: Protected Area Management. *Science* 283: 1856-1857
- Kremen C., Merenlender A.M., and Murphy D.D. (1994) Ecological Monitoring: A Vital Need for Integrated Conservation and Development Programs in the Tropics. *Conservation Biology* 8(2): 388-397
- Leach M., Mearns R., and Scoones I. (1999) Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management. *World Development* 27(2): 225-247
- McNeely J.A. (1993) Economic Incentives for Conserving Biodiversity: Lessons from Africa. *Ambio* 22(2/3): 144-150
- Murphree M. (1993) Community as Resource Management Institutions. International Institute for Environment and Development, London
- Myers N., Mittermeier R.A., Mittermeier C.G., da Fonesca G.A.B. and Kent J. (2000) Biodiversity Hotspots for Conservation Priorities. *Nature* 403: 853-858
- Ndirangu J. (1997) A Synopsis of the Evolution of Community Conservation in Kenya: The USAID Contribution to Community Conservation Practice and Wildlife Policy Reform. Colorado State University, Fort Collins
- Noss A.J. (1997) Challenges to nature conservation with community development in central African forests. *Oryx* 31(3): 180-188
- Ntiati P. (1997) Conflict Between Wildlife Conservation and the Sedenterization Of the Pastoral People: A Case Study of the Maasai of Kenya. Master of Arts thesis, University of Reading, Reading
- Richards M. (1996) Protected Areas, People and Incentives in the Search for Sustainable Forest Conservation in Honduras. *Environmental Conservation* 23(3): 207-217
- Treseder L. (1999) Reflections on Canadian Experience in Community-based Wildlife Management. Chapter 6. In: L. Treseder, et al. (eds.). *Northern Eden: Community-based Wildlife Management in Canada*. Evaluating Eden Series Number 2. Canadian Circumpolar Institute (CCI) Press, University of Alberta, Edmonton
- Turner M.D. (1999) Conflict, Environmental Change, and Social Institutions in Dryland Africa: Limitations of the Community Resource Management Approach. *Society & Natural Resources* 12(7): 643-658
- UNDP (1998) Human Development Report 1998. Oxford University Press, New York
- USAID (1991) Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247). United States Agency for International Development, Nairobi

Watson A. (1998) Conservation of Biodiverse Resource Areas (COBRA) Project Summary Report: Second Draft. Development Alternatives International, Bethesda

Western D., Wright R.M. and Strum S.C. (eds.) (1994) Natural Connections: Perspectives in Community-based Conservation. Washington: Island Press, 1994

World Bank (1996) World Bank Participation Sourcebook. World Bank, Washington, D.C.

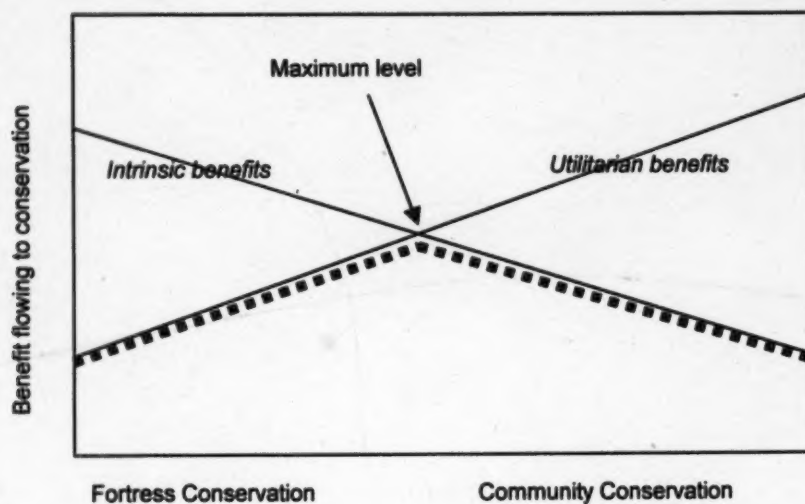


Figure 3.1: A conceptual view of intentional and inadvertent benefits (under dotted line) flowing to conservation under a gradient of fortress to community conservation systems.

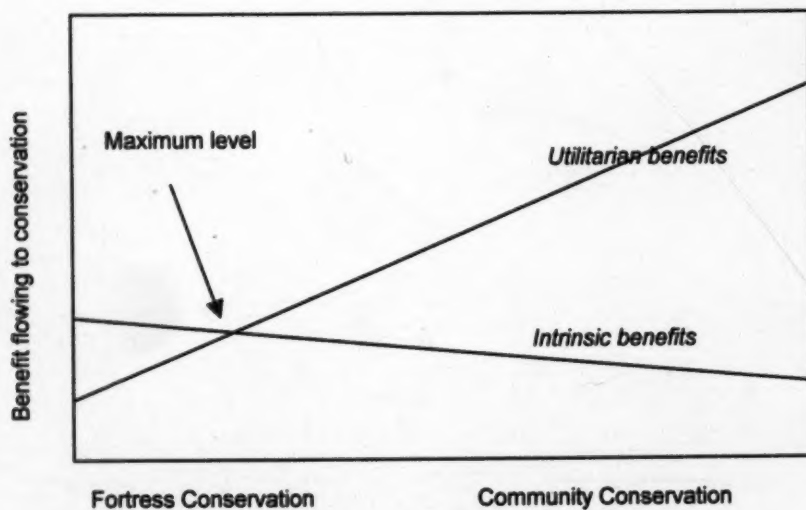


Figure 3.2: Benefits flowing to conservation under the present management (Fortress Conservation) strategies at the Mwaluganje Community Elephant Sanctuary, Kenya.

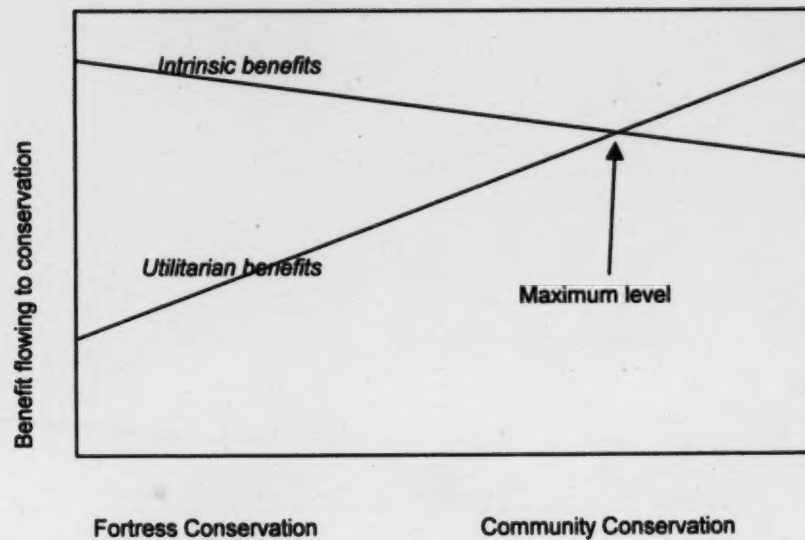


Figure 3.3: Benefits flowing to conservation under the present management (Community Conservation) strategies at the Il Ngwesi Group Ranch, Kenya.

CHAPTER IV: POVERTY, EMPOWERMENT AND COMMUNITY CONSERVATION IN EAST AFRICA

Introduction

An estimated one-quarter of the world's people live in severe poverty, while the gap between rich and poor continues to rise (UNDP 1997). Given the extent and severity of poverty, the United Nations has declared that the eradication of poverty is one of the fundamental goals of the entire United Nations system¹. Early attempts at poverty reduction in the 20th century saw poverty as a lack of material resources and of technical knowledge and skills. Despite huge financial expenditures and decades of efforts, these programs have fallen short of expectations to alleviate global poverty. The problem is that anti-poverty programs frequently focus on the symptoms of poverty – hunger, disease, unemployment – and not on the root causes². Poverty is much more than a lack of material or technical resources: poverty also includes vulnerability, powerlessness, isolation, and physical weakness (Chambers 1983). Overcoming poverty is also about empowering people. As powerlessness is a central source of poverty, empowering people must be a central part of the solution (UNDP 2000).

This emphasis on global poverty reduction comes not only from ethical concerns but because poverty is seen as a threat to political, economic, and increasingly, to conservation and environmental systems (Langdon 1999). Publications such as the World Conservation Strategy (IUCN *et al.* 1980) asserted that conservation can not be achieved without development to alleviate the poverty of hundreds of millions of people. Traditional approaches to conservation have mostly ignored poverty. In fact, the standard conservation recipe of removing local people from their land and alienating them from their resources can increase local poverty. In Sub-Saharan Africa, where one-half of the population lives in extreme poverty, this 'Fortress Conservation' approach has come under increasing criticism. Kenya is one of many African countries that have attempted to remedy this situation and increase conservation effectiveness by involving local communities in not just the costs but in the benefits of conservation. Early experiments with 'Community Conservation' programs at Amboseli National Park culminated in the 'Conservation of Bio-diverse Resource Areas' (COBRA) project in 1991. The aim of the \$7 million COBRA project is "to increase socio-economic benefits to communities living adjacent to Kenya's Parks/Reserves from conservation and sustainable management of wildlife and natural resources" (USAID 1991).

We believe that an important indicator of the long-term sustainability of Community Conservation initiatives such as COBRA is how much effort they put into addressing poverty issues. As the UN states, 'equitable social development that recognizes empowering of the poor to utilize environmental resources sustainability is a necessary foundation for sustainable development'³. Truly effective and sustainable conservation and development projects demand active and empowered local participation (Brohman 1997: 319). In light of this, we examined three COBRA funded projects in Kenya to determine what kind of impact they are having on poverty reduction. We used the Friedmann (1992) Empowerment Model, which identifies eight aspects of social empowerment. The values of these eight aspects must be large enough for households to move out of poverty on their own (Table 4.1).

The Study

The COBRA project focused on three districts in Kenya. We examined one Community Conservation project in each district: the Mwaluganje-Golinji Community Elephant Sanctuary in Coast District (Southeast Kenya), the Kimana Community Wildlife Sanctuary in Kajiado District (South-central Kenya), and the Il Ngwesi Tourist Bandas in Laikipia District (Central Kenya). The three projects, opened to the

¹ United Nations General Assembly, 19th Special Session, New York, 23-27 June 1997, Resolution Adopted by The General Assembly for the Programme for the Further Implementation of Agenda 21. Eradicating poverty [Available at: <http://www.un.org/documents/ga/res/spec/ares19-2.htm>]

² Projet de société: Canada and Agenda 21. Winnipeg: IISD, 1995. Online. Internet. <http://iisd.ca/worldsd/canada/project/c03.htm>

³ United Nations General Assembly, 19th Special Session, New York, 23-27 June 1997, Resolution Adopted By The General Assembly for the Programme for the Further Implementation of Agenda 21. Eradicating poverty [Available at: <http://www.un.org/documents/ga/res/spec/ares19-2.htm>]

public between 1995 and 1996, were started with financial assistance from the COBRA project as well as other persons and organizations and aimed at capturing tourism revenue.

Information on each project was gathered during six months of field research in 1999, using informal participatory evaluation and informal survey approaches. Understanding of the projects, in terms of poverty alleviation, was based on site visits, interviews with local community members and local and national government and conservation workers. Numerous published and unpublished reports were used to triangulate the data. Because of the difficulty of access, the amount of time available in each community varied; but, in all cases, special attention was made to corroborate community member reports with other sources. Quantification was desired but in answer to most questions, only qualitative data were given. Any discrepancies in answers became the source of further investigation. Data collection continued until no new information emerged from the interviews.

Results

Table 4.2 summarizes the qualitative evaluations of the three CC case studies in the alleviation of poverty. The eight bases of social power, as outlined in the Friedmann (1992) Empowerment Model, were used.

The Mwaluganje-Golinji Community Elephant Sanctuary

The Mwaluganje-Golinji Community Elephant Sanctuary is located on a natural corridor between the Shimba Hills National Reserve and the Mwaluganje Forest Reserve in the Kwale District of the Coast Province of Kenya. Land in the present day sanctuary is generally of high agricultural potential and agriculture has been practiced since at least 1970. An explosion in elephant population numbers in the 1980's led to a proposal to turn this area into a community owned elephant sanctuary. A two-year period of private and public meetings persuaded some fifty local landowners to join the sanctuary. Numerous others sold their land; many of these tracts were bought by a local hotel chain that built a tourist lodge within the sanctuary. A fence was constructed around the sanctuary in 1994, and the sanctuary opened for business in October 1996.

While the Mwaluganje Community Elephant Sanctuary may be benefiting tourism operators, the international community, the KWS, and a small cross section of the local community, the vast majority of people in the area do not receive financial or other benefits (Table 4.2). The single issue most mentioned by local community members was the increasing poverty and hunger due to the ineffective fence (being improved) and crop damage from elephants and wild pigs. Heavy elephant damage to food and cash crops was seen on the East Side of the Sanctuary. Several farmers reported that in years past they could finance their children's education by growing crops of manioc and corn; now the level of animal destruction is too high. Another problem emphasized by many community members was the loss of access to resources in the sanctuary such as wood for construction, non-timber forest products, and water for livestock. After three and a half years of operation, local community members had received one payment of 1000 shillings (approximately 25 USD) per acre of land owned, much less than the potential economic return from agriculture. While twenty-seven local people are employed by the Sanctuary, the vast majority of people living in the area are not members, receive no financial benefit from the Sanctuary, and continue to suffer high levels of human-wildlife conflict.

It seems that coercive methods rather than interactive dialogue have been used to ensure participation, and the powerlessness of local people has increased. Some attempt at institutional capacity building at the local level occurred in the early days of the Sanctuary (rangers and a local clerk were trained) but has not continued and was not mentioned by any interviewee. In real terms, there is no difference between the old program of compensating people for damage to crops and the sanctuary, where local people have little decision making power.

The Kimana Community Wildlife Sanctuary

Situated beside a watering point for animals migrating between Amboseli and Tsavo National Parks, the Kimana Community Wildlife Sanctuary covers 4200ha (approximately 17%) of the Maasai owned, Kimana

Group Ranch. The Sanctuary opened in February 1996 in an attempt to capture part of the local tourism business for group ranch members. The Kimana Community Wildlife Sanctuary was one of the first community sanctuaries in Kenya, and generated both national and international publicity at its inception⁴.

In spite of initial local, national and international optimism, the performance of the Sanctuary has not been promising (Table 4.2). Ecologically, data gathered by the nearby Kuku Field Studies Centre indicates that visitors to the sanctuary find more cattle than wildlife. While the presence of the sanctuary has stopped the spread of irrigated agriculture within the sanctuary, deforestation up to the edge of the sanctuary has continued. Economically, apart from an initial peak in gate receipts, actual sanctuary profits appear to be quite low. Earnings appear to have remained in the hands of the Group Ranch leadership. At the time of fieldwork, salaries for sanctuary rangers had not been paid in ten months. Local community members interviewed reported the construction of an electric fence, school and health clinic, along with educational bursaries and revenue sharing money as benefits of the Sanctuary. However, all of these reported benefits are not a result of the sanctuary but are part of other donor initiatives that all group ranches in the area received regardless of whether or not they created a wildlife sanctuary.

The major criticism of the sanctuary management by the Maasai community is that financial control rests with the wealthy and powerful members of the community. For many members of the Group Ranch, the only wide spread benefit derived from the sanctuary is livestock grazing, and this activity conflicts with the tourism industry. Human-wildlife conflict, wildlife caused disease, and conflict over scarce resources (primarily water) remain as critical problems in the area. Lichtenfeld (1998) found that no supportive development projects have been initiated, and the means of empowerment and skill building are accessible to only a select group of people.

The Il Ngwesi Tourist Bandas

Il Ngwesi is a group ranch of approximately 8600 hectares located in the Mukogodo Division of Laikipia district. There are minimal economic activities in the area as it is generally unsuitable for rain fed or irrigated crop production (Herren 1991). For the Il Ngwesi group ranch in particular, there are currently only ten hectares under crop production, with generally low productivity due to crop pests, wildlife conflicts, poor agricultural extension services, poor soils and erratic rainfall patterns. While livestock remains the dominant economic activity, there are problems with drought and with the prevalence of East Coast Fever (a major constraint to livestock production). Livestock numbers gathered by a Participatory Rural Appraisal report on Il Ngwesi indicate an average of about one Livestock Equivalent per capita, far less than is necessary to sustain life (Wafula and Lembuya 1995). Traditionally people in the Mukogodo area derived part of their energy and protein from wildlife meat (Herren 1991). Because the Mukogodo Division contains a high percentage of the Laikipia District's remaining wildlife, the challenge is to find alternative income sources for the people living in this division.

The Il Ngwesi local community owns and operates a small number of rental cottages, or 'bandas', funded by the KWS and private organizations. The bandas opened for business in December 1996, and have proved to be extremely popular with tourists, researchers and educational tour participants. Ecologically, there is little hard data available. Group ranch members interviewed spoke of animal numbers increasing and that people are now reporting poachers. Economically, the bandas have had clearer benefits for the local community. A substantial income accrues to the approximately 25 men who are employed at the lodge, while another 25 men and women earn smaller but fairly reliable incomes from an associated enterprise (a cultural boma) (Table 4.2). A large but unknown number of people have also increased their casual labour earnings during construction (Ashley and Hussein 2000). Local elders interviewed mentioned that other monies earned by the bandas are applied to community development projects such as schools and bursaries; the two vehicles owned by the company help with local transportation; and there is increased security through a radio network established by the project. As Ashley and Hussein (2000) found, these impacts of the project were more important to most Group Ranch members than the jobs that had been created.

⁴ In 1996, the Sanctuary won the British Guild of Travel Writers award as the International Tourism Project of the Year, and in the same year, it was the site of a major fundraising event hosted by the Royal Ballet of London.

Criticisms of the project include that it is control and earnings benefit only a small section of the community, having minimal effects for poorer community members (Ashley and Hussein 2000). For instance, employees of the lodge are for the most part chosen from committee members' families. The management of the bandas, and the beneficiaries of employment and benefits, are almost exclusively men. While on the surface the tourist bandas appear to be a community initiated and managed project, the idea for the project, the money, the marketing, and the management have all come from outside the community. A training program is in place to transfer management responsibilities of the sanctuary to the local community but it remains to be seen whether such an approach will help with the long-term sustainability of the project.

Discussion and Conclusions

This research suggests that there has been little redistribution of power and control over resources to local communities situated near these three CC case studies. In Kenya (similar to what Adams and Hulme (1999) found) CC initiatives look remarkably similar to their colonial predecessors – ultimate ownership of wildlife remains in the hands of the state. The fundamental issue of empowerment of the local community has been minimized and most attention paid to the material benefits of wildlife conservation. Even with this attention to economics, only one of the three projects examined in the present study was economically beneficial to the target community. In all three cases, revenues earned primarily go to leaders or committees. The community conservation rhetoric speaks glowingly about local ownership and management of projects. In Kenya, however, there has been little move to include local people in the creation or modification of the policies that affect their lives, or to encourage community ownership and local leadership of projects. While most international and national conservation groups have indicated their support for the principles behind CC, there is a clear discrepancy between the rhetoric and reality. I believe there are four main reasons for this.

The first reason is the amount of work involved. Initially CC was seen as a way for governments in the developing world to reduce expenditures by delegating responsibilities to non-governmental organizations and local communities. Subsequently, practitioners have found that it takes much more time, money, and resources to integrate conservation and development processes. One conservation officer involved in revenue sharing in the Amboseli area told us he found himself involved in eight months of long, heated meetings simply to decide how this money was to be divided amongst local community members. Faced with the difficulties and frustrations of involving the community in conservation efforts, some conservation practitioners have returned to a more top-down authoritarian approach. Another conservation officer interviewed in Kenya told of abandoning a Participatory Rural Appraisal approach to formulate community conservation programs. Citing problems with the long-time frame involved and community discouragement, he is now using outside consultants to design programs, which the local community is then expected to accept.

A second reason for resistance to local empowerment comes from fear of poor conservation results. Some, like U.S. economist Lester Thurow, claim that 'environmentalism is an interest of the upper middle class. Poor countries and poor individuals simply aren't interested' (quoted in Langdon 1999: 77). It is true that freeing people from poverty is no guarantee of successful conservation outcomes; empowering people does not necessarily reduce tendencies towards universal human vices such as laziness or greed. I do not believe, however, that only the 'upper middle classes' of the world are interested in conservation. People's lives in most Southern countries are based on the rural resource base, which may translate into a deep concern for its long-term sustainability. In our study, poor rural farmers suffering from much human-wildlife conflict were still concerned about the value of conserving wildlife for future generations.

The third reason for discrepancy between the rhetoric and the reality of CC initiatives is that most CC projects are instituted by organizations with a primary mandate of conservation rather than development. Because concepts such as community development, grassroots participation and honouring indigenous knowledge have become key priorities among multi-lateral lending agencies and other development institutions, funding for CC projects is granted under the pretense that these associated goals will be targeted. In our assessment, the social development goals are assumed to be a natural outgrowth of the

projects, without specific attention paid to the expertise and commitment it requires to keep social development in the forefront of the community conservation program. Inadequately trained conservation officers tend to turn to coercive methods to maintain social control over a region, often discouraging local commitment to these projects (Brosius *et al.* 1998).

The fourth reason I offer for the discrepancy between the reality and the rhetoric of CC is the lack of clear goals, clear delegation of responsibility and sound evaluation procedures in project management. As well, quantitative information on the above would do a great deal to resolve current conservation/development debates and improve future CC programs.

Creating the conditions for communities to gain power, free themselves from poverty, and fully participate in CC projects is not an easy process. It involves a significant and long-term commitment on the part of funding organizations, government, and especially the local community. It is far easier to simply go through a cursory process of community consultation and then use a centralized approach to push through a short-term project. Such projects often do more to satisfy donor expectations than they do to promote long-term development and biodiversity conservation. The environmental future of Africa will ultimately depend on those who decide how land is used. Donor-dependent East African environmental institutions and current donor fatigue suggest that this will ultimately be local communities rather than national and international elites (Hulme and Murphree 1999).

I believe that the eight bases of social power that Friedmann identified should be revisited in terms of application to current CC projects and quantification of the evaluation should be addressed for any new CC projects. As Barrows and Murphree (1999) mentioned, tenure over land and resources must be secured. Project activities should ease the burden of local households to obtain basic services and commodities, not add to it. Education and training of the local community is essential and should be supported; an example in Kenya is the work of the Conservation Development Company Ltd., which strengthens local institutions by training community members in business skills. Appropriate and relevant information on project activities must be better disseminated to the community. It is only when poor people know what monies are available, how they are being channeled, what programme rules and procedures exist, and how decisions are made, that they can hold programme functionaries (public or private) accountable (Sen 1997). Although small-scale local projects can help the people directly involved, many changes can only be achieved through interventions which focus on major policy reforms, changes to laws and regulations, reallocation of financial and other resources, and promotion of changes in attitude through public debate (Sen 1997). Even on a local scale, it is rare that conservation groups possess the resources (financial, human, and otherwise) to address all aspects of community empowerment. To work at achieving all these goals, links between development groups, conservation groups, government, and the local community need to be strengthened. Vigorous and healthy bodies, access to work and appropriate tools, and adequate financial resources are essential. In some cases, this might entail looking at broader definitions of conservation. Projects involving charismatic megafauna may epitomize the Western conception of conservation, but this is not always what local people want, what is best economically, or what is best for the local environment. For example, in certain areas biodiversity conservation might best be assured through promotion of sustainable, indigenous land use practices.

By arguing for the greater importance of community empowerment, I am not arguing for a dismissal of state involvement in conservation initiatives. Achieving conservation goals is not about making a choice between state-centred or society-centred approaches: effective conservation demands dynamic mixes of both state and local societal action (Adams and Hulme 1999). However, not paying attention to the poverty that disempowers local institutions and people is the same as dismissing the poor to the sidelines. To ignore poverty is simply to repeat the past: only in this case instead of agricultural plantations we are creating biodiversity plantations. Community Conservation, with its emphasis on decentralization of authority and local participation, is an ideal vehicle for the poor to take control over their lives, provided of course that CC approaches change. I agree that conservation and development must be better integrated and that empowerment of those trapped in poverty is an essential part of this process.

Literature Cited

- Adams, W. M. and D. Hulme (1998). *Conservation and Communities: Changing Narratives, Policies and Practices in African Conservation*. Manchester: Institute for Development Policy and Research.
- Ashley, C. and K. Hussein (2000). *Developing Methodologies for Livelihood Impact Assessment: Experience of the African Wildlife Foundation in East Africa*. London: Overseas Development Institute.
- Brohman, J. (1997) *Popular Development*. Cambridge: Blackdell Publishers.
- Brosius, J. P., A. L. Tsing and C. Zerner (1998) 'Representing Communities: Histories and Politics of Community-Based Natural Resource Management'. *Society & Natural Resources* 11(2): 157-168.
- Chambers, R. (1983) *Rural Development: Putting the Last First*. London: Longman Group.
- Friedmann, J. (1992) *Empowerment: The Politics of Alternative Development*. Cambridge: Blackwell.
- Herren, U. J. (1991) *Socioeconomic Strategies of Pastoral Maasai Households in Mukogodo, Kenya*. Ph.D. Thesis. Bern: University of Bern.
- Hulme, D. and M. Murphree (1999) 'Communities, Wildlife, and the 'New Conservation' in Africa'. *Journal of International Development*. 11: 277-285.
- IUCN, UNEP, WWF. (1980) *World Conservation Strategy: Living Resource Conservation for Sustainable Development*. Gland: IUCN.
- Langdon, S. (1999) *Global Poverty, Democracy and North-South Change*. Toronto: Garamond Press.
- Lichtenfeld, L. L. (1998) *Local Participation and Conservation in Kenya: A Case Study of the Kimana Community Wildlife Sanctuary*. Yale University: School of Forestry and Environmental Studies.
- Sen, G. (1997) *Empowerment as an Approach to Poverty*. December 1997, Working Paper Number 97.07. Background paper to the Human Development Report 1997.
- UNDP (1997) *Human Development Report 1997*. New York: Oxford University Press.
- UNDP (2000) *Human Development Report 2000*. New York, Oxford University Press.
- USAID (1991). *Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247)*. Nairobi: USAID.
- Wafula, J. and P. Lembuya (1995). *Report on a Participatory Rural Appraisal (P.R.A.) exercise for Iling'wesi Group Ranch*. Nairobi: Kenya Wildlife Service.

Table 4.1. The Empowerment Model to alleviate poverty has eight social aspects. The examples must be of sufficient value to permit the household to move out of poverty (adapted from Friedmann 1992).

ASPECTS OF SOCIAL EMPOWERMENT	EXAMPLES
Defensible life space	Adequate household space; supportive neighborhood
Surplus time	Time over and above that to gain a subsistence livelihood; time for wage employment and seeking other needs
Knowledge & skills	Sufficient education and technical skills to ensure long-term economic prospects
Appropriate information	Accurate information necessary for household production, health, public services and opportunities
Social organization	Formal and informal groups that provide information and a more comfortable life
Social networks	Supportive horizontal networks of other households and vertical networks through the social hierarchy
Instruments of work and livelihood	Healthy bodies, adequate tools and the domestic sphere for household production
Financial resources	Net monetary income of households and credit arrangements

Table 2. Application of the Empowerment Model (adapted from Friedmann 1992) to three Community Conservation projects in Kenya

ASPECTS OF SOCIAL EMPOWERMENT	MWALUGANJE-GOLINI COMMUNITY ELEPHANT SANCTUARY	KIMANA COMMUNITY WILDLIFE SANCTUARY	IL NGWESI TOURIST BANDAS
Defensible life space	Title deeds for some members. Fence built to prevent crop damage	Deteriorating	Radio network
Surplus time	None demonstrated	No change	Vehicle, Road construction
Financial resources	1000 Shillings to members. None to others.	Only for leadership	Minimal but significant
Social organization	Members only - participation limited	Some participation via elected leaders	Participation in meetings and elections
Social networks	Members only - limited	Some	Some
Appropriate information	Minimal to members. None to others	Little information to members	Unknown
Instruments of work and livelihood	Some employment (27 persons). Reduced access to productive land, wood, water, and resources	Minimal employment. Reduced access to productive land and water	Some employment
Knowledge & skills	Minimal training at beginning of project	Minimal training at beginning of project	Training, school and educational bursaries

CHAPTER V: GENERAL DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

DISCUSSION

There was once a group of blind men who came across an elephant. Surrounding the (obviously anesthetized) elephant, the blind men began to describe the elephant. "An elephant is like a great tree," says one who is holding the elephant's leg. "No, it is like a long snake," says another standing next to the elephant's trunk. "You're all wrong" a third chips in who has a hand on the elephant's ear. Such myopic visions of reality are far too similar to current debates on conservation. They are also far too similar to Hirschman's (1968) criticism of development action, which he argues is habitually based on oversimplifications of the world's complexity (quoted in Adams and Hulme 1999). Such simplifications lead to situations where the Community Conservation narrative, as the Fortress Conservation narrative before it, has become operationalized into a standardized 'blueprint' approach that is often ineffective or even destructive (Adams and Hulme 1998). Conservation practitioners may have moved from holding the elephant's tail to embracing the elephant's leg but have moved no closer to getting an overall view of what an elephant is.

The all or none approaches of the past have led to a series of debates that often paralyze conservation action: is conservation sustainable use or strict preservation? Is community or government control of resources better? Is community participation an important component of conservation success? The answers to such questions are often based on philosophical reasons; ignoring ecological, social, and economic realities. The answers to such questions are also often based on western philosophy; ignoring local ideas, knowledge, and needs. I believe that there is no one answer to such questions, but that conservation success requires a dynamic mixture of approaches specific to the situation. Such an approach is not easy – it requires more study, rather than less – into different areas. The results of this study show that such an approach requires more attention paid to a number of areas:

CONCLUSIONS

- 1) Because of the lack of quantitative data, there is little conclusive evidence to say that Community Conservation projects are either detrimental or beneficial to either conservation or development. While assertions of program success abound, it is readily admitted "quantitative data to prove these qualitative statements are not available" (Anonymous 1997). The data that are available is often incomplete or out of date (KWS 1994: 18), or of questionable validity. For example, a comparison of four different sources for livestock numbers in Kenya over a twenty year period (three different government organizations and one private researcher) showed discrepancies in cattle numbers of up to 200%. Lack of quantitative data means that management of wildlife (which is increasingly going to have to happen) is made much more difficult. The short-term nature of many projects means that although data may be collected over a several years time, it is often lost once project funding has ceased. The profusion of private researchers, all funded by different private organizations, means that there is very little sharing of information between researchers and between researchers and government officials.
- 2) Barrows and Murphree (1999) have identified secure tenure over land and resources as the crucial element in the success or failure of Community Conservation projects. Evidence from Kenya also points to the importance of private ownership. An IUCN survey found that antelope populations and wildlife in general now receive higher levels of protection and management on private game ranches than in most of the country's national parks and reserves (East 1997); and DRSRS data show that wildlife numbers have suffered less of a decline on privately held lands (Norton-Griffiths 1998). Unfortunately, land ownership in many areas of the country is not secure. Many people still live as squatters, the government is pushing policies of group ranch subdivision in many areas, and lands are still being confiscated to make way for national parks and reserves. Faced with such a situation, it is understandably difficult for people to make long-term investments in their land.
- 3) The COBRA Project Book states that "analysis in other African countries and to a limited degree in Kenya has shown that where governments establish a partnership approach to conservation of

biological resources and establish socio-economic incentives for improved wildlife protection and natural resource management, the pressures on parks/reserves and other key natural resource areas can be significantly reduced and benefits derived from such areas can be sustained" (USAID 1991). The rhetoric of Community Conservation calls for partnerships with, and participation and empowerment of the local community. The on-the-ground reality in Kenya is that local communities are often seen as passive participants with little to contribute to conservation programs. Most partnerships set up are very unequal partnerships, and appear to be mostly attempts to buy off communities.

- 4) The United Nations states that Kenya's main development challenges are poverty alleviation, unemployment, infrastructure development, economic growth and urban development. The main social challenges are population control, public health, illiteracy and a sustainable utilization of resources. The main environmental challenges are conservation of biodiversity, combating desertification, marine and coastal resource management, water, environmental information, education and training, and waste management⁶. While CC projects can have positive impacts on small, local level populations, they are but one aspect of a whole range of development and conservation projects that are necessary. As Richard Leakey has written, truly effective conservation will only happen if we can find a way to raise living standards for the majority (Leakey 1998), not just those impacted by one small project.
- 5) It is important to remember that an unsustainable pattern of resource use in the industrialized world is one of the contributing factors to environmental degradation and poverty in the developing world. For us to talk about the need for sustainable and environmentally friendly growth in the developing world while ignoring our overconsumption is one of the worst forms of hypocrisy. It is also tempting to focus on conservation and development projects 'out there' while ignoring our back yards. As the Canadian National Park system has found out, the collision between conservation and development is not just a phenomenon of the developing world. In a report released this year (2000) a federal task force found that all of Canada's National Parks save one (Ivvavik in the Yukon) suffer from overuse, pollution, invasion of exotic species and outside developments such as dams, forestry projects, and agriculture.

RECOMMENDATIONS

While there are many recommendations for improvement that can be made, the most crucial ones are summarized below.

- 1) There is a great need for more quantitative data on CC projects. We must put more effort into collecting good, solid scientific data so that our public debates on conservation are based on fact not on faith (Lakatos 1978).
- 2) Much more effort needs to be put into empowering local people, and especially securing ownership rights to land.
- 3) Empowerment of local people must also include putting much more effort into working with, and not for, local people: listening to their needs, challenging their ideas, learning from their experience, and building up their capacity. Partnerships with local people must be based on equality.
- 4) We must remember that Community Conservation is only one tiny element of the international struggle to achieve truly sustainable conservation and development. Long-term, sustainable conservation and development requires an overall, global approach as well as local level projects. One part of this effort may be to lobby governments to implement policies that protect and change policies that negatively effect the global environment.
- 5) Industrialized countries such as Canada must acknowledge their part in the problem both nationally and internationally. This may involve working to reduce consumption patterns in the North, putting more effort into conservation issues in our own backyards, and changing or minimizing consumption

⁶ <http://www.un.org/csa/sustdev/countnew.htm>:

patterns in industrialized countries that negatively affect the people and environment in non-industrialized countries.

LITERATURE CITED

Anonymous (1997). COBRA Assessment - Discussion Draft. Nairobi, USAID.

Barrow, E. and M. Murphree (1999). Community Conservation From Concept to Practice: A Practical Framework. Manchester, Institute for Development Policy and Management.

East, R. (1997). Antelope Survey Update, The World Conservation Union Species Survival Commission - Antelope Specialist Group.

KWS (1994). Wildlife-Human Conflicts in Kenya. Nairobi, Kenya Wildlife Service.

Leakey, R. (1998). "Food for Thought." Swara 21(3): 4-10.

Norton-Griffiths (1998). Why Kenyan Conservation is Failing. SWARA.

USAID (1991). Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247). Nairobi, USAID.

Adams, W. M. and D. Hulme (1998). Conservation and Communities: Changing Narratives, Policies and Practices in African Conservation. Manchester, Institute for Development Policy and Research.

Anonymous (1997). COBRA Assessment - Discussion Draft. Nairobi, USAID.

Barrow, E. and M. Murphree (1999). Community Conservation From Concept to Practice: A Practical Framework. Manchester, Institute for Development Policy and Management.

East, R. (1997). Antelope Survey Update, The World Conservation Union Species Survival Commission - Antelope Specialist Group.

KWS (1994). Wildlife-Human Conflicts in Kenya. Nairobi, Kenya Wildlife Service.

Lakatos, I. (1978). Falsification and the methodology of scientific research programmes. The Methodology of Scientific Research Programmes. J. Worrall and G. Currie. Cambridge, Cambridge University Press.

Leakey, R. (1998). "Food for Thought." Swara 21(3): 4-10.

Norton-Griffiths (1998). Why Kenyan Conservation is Failing. SWARA.

USAID (1991). Conservation of Biodiverse Resource Areas (COBRA) Project Paper (615-0247). Nairobi, USAID.